

THE NEW FRAUD DIAMOND MODEL- HOW CAN IT HELP FORENSIC ACCOUNTANTS IN FRAUD INVESTIGATION IN NIGERIA?

GBEGI, D.O

Department Of Accounting, Kogi State University, Anyigba, Nigeria

ADEBISI, J. F. Ph.D

Director General, Nigerian College Of Accountancy, Jos, Nigeria

ABSTRACT: *Fraud has been associated with human organisation from recorded history. Investigating and detecting fraud is not an easy task and requires thorough knowledge about the nature of fraud, how it can be committed and concealed. Forensic Accountants are increasingly being asked to play an important role in helping organisations investigate, prevent and detect fraud. This paper aims at broadening Forensic Accountants knowledge about fraud and why it occurs. The paper adopts secondary source of data to explain Wolf and Hermanson fraud theory and shows its relevance, presents the other fraud models and relates them to Wolf and Hermanson's model, and proposes a "New Fraud Diamond Model" that Forensic Accountants could use when assessing the risk of fraud in Nigeria.*

KEYWORDS: *Fraud, Fraud Diamond Model, Fraud Investigation, Forensic Accountants, Fraud Detection.*

INTRODUCTION

Fraud has been associated with human organization from recorded history. The eradication of which has remained elusive in most parts of human society and civilization. It is an act of deception intended for personal gain or to cause a loss to another party. Seetharaman, Sentivelmurugan and Periyamayagam (2004) observed that an analysis of the characteristics of perpetrators showed that the fraud-influencing factors include age, gender, position, educational background and existence of motive for collusion. Forensic accountants are increasingly being asked to play an important role in helping organizations investigate, prevent and detect fraud. Investigating and detecting fraud is not an easy task and requires thorough knowledge about the nature of fraud, why it is committed, and how it can be committed and concealed. Wolfe and Hermanson (2004) fraud theory explained why trust violators commit fraud and was widely used by professionals, academics and regulators. This work has been conceptualized as "fraud diamond." However, critics of the fraud diamond argued that even though the fraud diamond added the fourth variable "capability" to the fraud triangle and filled the gap in other theories, the model alone is an inadequate tool for investigating, preventing and detecting fraud. This is because, the two sides of the

fraud diamond (incentive/pressure and rationalization) cannot be observed, and some important factors like national value system are ignored.

Hence, this paper explained Wolf and Hermanson's fraud diamond theory and its significance. The paper also assesses the fraud diamond in the light of other fraud models and proposes a new fraud diamond model that should be considered by forensic accountants in assessing fraud risk. The paper adopts secondary source of data through internet, journals and textbooks.

CONCEPTUAL ISSUES

Joshi (2003) sees forensic accounting as the application of specialized knowledge and specific skills to stumble upon the evidence of economic transactions. Zysman (2001) puts forensic accounting as the integration of accounting, auditing and investigative skills. Simply put, forensic accounting is accounting that is suitable for legal review offering the highest level of assurance and including the generally accepted connotation of having been arrived at a scientific fashion (Crumbley, 2006). Coenen (2005) states that forensic accounting involves the application of accounting concepts and techniques. It demands reporting, where the accountability or the fraud is established and the report is considered as evidence in the court of law or in the administration proceedings (Joshi, 2003). It provides an accounting analysis that is suitable to court, which will form the basis of discussion, debate and ultimately dispute resolution (Zysman, 2001). This means that forensic accounting is a field of specialization that has to do with provision of information that is meant to be used as evidence especially for legal purposes. The persons practicing in this field is known as a forensic accountant who investigates and documents financial fraud and white-collar crimes such as embezzlement and investigates allegations of fraud, estimates losses, damages and assets and analyses of complex financial transactions. They provide those services for corporations, attorneys, criminal investigators and the government (Coenen, 2005). Their engagements are usually geared towards finding where money went, how it got there and who was responsible. They are trained to look beyond the numbers and deal with the business reality of the situation (Zysman, 2001). Dandago (1997), fraud is an international misrepresentation of financial information by one or more individuals among management, employees or third parties. It involves the use of criminal deception to obtain an unjust or illegal advantage. It is a deliberate cheating or deception intended to gain an undue advantage. Wells (2011) sees fraud as different from error, which refers to "unintentional misstatement or omissions of amount or disclosures from an entity's accounting records or financial statements."

EMPERICAL REVIEW

Why people commit fraud was first examined by Cressey Donald, a criminologist in 1950. His research was about what drives people to violate trust. He interviewed 250 criminals over a period of 5 months whose behaviors met two criteria: (i) the person must have accepted a position of trust in good faith, and (ii) he must have violated the trust (Rasha and Andrew, 2012). He found that three factors must be present for a person to violate trust and was able to conclude that: "trust violators when they conceive of themselves as having a financial problem which is non-sharable, have knowledge or awareness that this problem can be secretly resolved by violation of the

position of financial trust, and are able to apply to their own conduct in that situation verbalizations which enable them to adjust their conceptions of themselves as users of the entrusted funds or property” (Rasha and Andrew, 2012). The three factors were non-sharable financial problem, opportunity to commit the trust violation, and rationalization by the trust violators, Cressey (1987) as cited by Coenen (2005). When it comes to non-sharable financial problem, Cressey (1987) as cited by Rasha and Andrew (2012) stated “persons become trust violators when they conceive of themselves as having incurred financial obligations which are considered as non-socially-sanctionable and which, consequently, must be satisfied by a private or secret means.”

He also mentioned that perceived opportunity arises when the fraudster sees a way to use their position of trust to solve the financial problem, knowing that they are unlikely to be caught. As for rationalization, Cressey as cited by Rasha and Andrew (2012), believed that most fraudsters are first-time offenders with no criminal record. They see themselves as ordinary, honest people who are caught in a bad situation. This enables them justify the crime to themselves in a way that makes it acceptable or justifiable. Cressey as cited by Rasha and Andrew (2012) found that: “in the interviews, many trust violators expressed the idea that they knew the behavior to be illegal and wrong at all times and that they merely kidded themselves into thinking that it was not illegal.”

Over the years, Cressey’s hypothesis has become well known as “the fraud triangle” as shown in figure 1 below. The first side of the fraud triangle represents a pressure or motive to commit the fraudulent act, the second side stands for perceived opportunity, and the third side represents a rationalization (Wells, 2011).

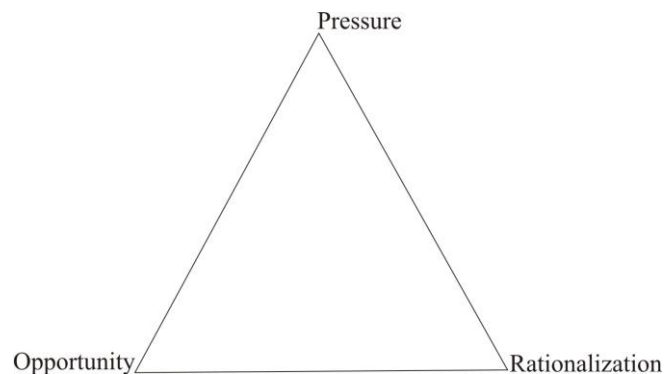


Figure 1: Fraud Triangle

Source: Wells (2011)

Cressey as cited by Wells (2011) divided the non-sharable financial problems into six categories: difficulty to payback debt, problems resulting from personal failure, business reversals (incontrollable business failures such as inflation or recession), physical isolation (a trust violator is separated from people who can help him), status gaining (living beyond one’s means) and employer-employee relations (employer’s unfair treatment).

Researchers in the audit literature defined differently the components of the fraud triangle and gave different examples for each. For instance, Lister (2007) defined

pressure/motive to commit fraud as “the source of heat for the fire” but he believed the presence of these pressures in someone’s life does not mean he or she will commit fraud. He also added there are three types of motivation or pressure: personal pressure to pay for lifestyle, employment pressure from continuous compensation structures, or management’s financial interest, and external pressure such as threats to the business financial stability, financier covenants, and market expectations. Lister (2007) saw opportunity, which is the second side of the fraud triangle as “the fuel that keeps the fire going” and he believed even if a person has a motive, he or she cannot perpetrate a fraud without being given an opportunity. He also gave some examples of opportunities that can lead to fraud like high turnover of management in key roles, lack of segregation of duties, and complex transactions or organizational structures. As for the third component of the fraud triangle “rationalization” Lister (2007) defined it as “the oxygen that keeps the fire burning.” Although, forensic accountants may not be able to assess the personal value system of each individual in the organization, they can assess the organizational culture.

On the other hand, Vona (2008) believed the motive to commit fraud is often associated with personal pressure or corporate pressure on the individual. The motive to commit fraud may be driven by the pressures influencing the individual, by rationalization, or by sheer opportunity. He believed a person’s position in the organization contributes to the opportunity to commit fraud. He also believed there is a direct correlation between opportunity to commit fraud and the ability to conceal the fraud. Thus, understanding the opportunity for fraud to occur allows forensic accountants to identify which fraud schemes an individual can commit, and how fraud risks occur when the controls do not operate as intended by management.

Mudrock (2008) also argued that pressure can be a financial pressure, non-financial pressure or political and social pressure. Non-financial pressure can be derived from a lack of personal discipline or other weaknesses such as gambling, drug addiction. While political and social pressure occurs when people feel they cannot appear to fail due to their status or reputation. However, Rae and Subramaniam (2008) said pressure relates to employee’s motivation to commit fraud as a result of greed or personal financial pressure, and opportunity refers to a weakness in the system where the employee has the power or ability to exploit, making fraud possible, while rationalization as a justification of fraudulent behaviour as a result of an employee’s lack of personal integrity, or other moral reasoning.

Albrecht, Albrecht and Albrecht (2008, 2010), however, mentioned pressure/motive can be financial or non-financial and they gave examples of perceived financial pressures that can motivate fraud like: personal financial losses, falling sales, inability to compete with other companies, greed, living beyond one’s means, personal debt, poor credit, the need to meet short-term credit crises, inability to meet financial forecasts, and unexpected financial needs. They also gave example of non-financial pressure such as: the need to report results better than actual performance, frustration with work, or even a challenge to beat the system. They believed that even with very strong perceived pressure, executives who believe they will be caught and punished rarely commit fraud.

They also mentioned some examples of rationalizations that executives can use to commit fraud like: “we need to keep the stock price high”, all companies use

aggressive accounting practices or it is for the good of the company. As for perceived opportunities to commit fraud, examples include: a weak board of directors, a lack of or circumvention of controls that prevent/detect fraudulent behaviour, failure to discipline fraud perpetrators, lack of access to information and lack of an audit trial. It can be concluded from the above that motives/pressures were classified differently. Some researchers classified them as personal, employment or external pressure, while others classified them as financial and non-financial pressures. However, it can be noticed that both classifications are somehow related. For instance, personal pressure can come from both financial and non-financial pressure. A personal financial pressure in this case could be gambling addiction or sudden financial need, while a personal non-financial pressure can be lack of personal discipline or greed. By the same token, employment pressure and external pressure can come from either financial or non-financial pressures. The classifications of motive/pressure are shown in the table below:

Personal pressure	<p>Financial: Gambling, addiction, sudden financial problem, paying lifestyle.</p> <p>Non-financial: Lack of personal discipline, greed.</p>
Corporate/employment pressure	<p>Financial: Continuous compensation structure, management financial interest, low salaries.</p> <p>Non-financial: Unfair treatment, fear to lose the job, frustration with work, or a challenge to bear the system.</p>
External pressure	<p>Financial: Threats to business financial stability, market expectations.</p> <p>Non-financial: Ego, image or reputation, social pressure.</p>

Figure 2: Classification of Motives/Pressure, Source: Rasha & Andrew (2012)

Although, Cressey's fraud triangle was supported by audit regulators or professionals and standards, critics (Albrecht *et al* 1984, Wolfe and Hermanson 2004, Dorminey *et al* 2010) argued that the model alone is an inadequate tool for deterring, preventing, investigating and detecting fraud. Albrecht *et al* (1984) introduced the "fraud scale model" as an alternative for the fraud triangle model. The fraud scale includes personal integrity instead of rationalization and it is particularly applicable to financial reporting fraud where sources of pressure (e.g. analyst forecasts, management's earnings guidance, a history of sales and earnings growth) are more observed. They defined personal integrity as "the personal code of ethical behaviour each person adopts."

Personal integrity can be observed through observing both a person's decisions as well as the decision-making process. That person's commitment to ethical decision-making can be observed and this can help in assessing integrity and thus, the likelihood of an individual committing fraud. This research was conducted by performing an analysis of 212 frauds in the early 1980s to determine the motivations of the perpetrators of occupational frauds and abuses. They also collected

demographics and background information on the frauds through questionnaires that were distributed to 212 internal auditors of companies that had experienced frauds and classified motivations to commit financial reporting frauds into nine different types which are similar to those of Cressey's non-sharable financial problems: living beyond their means, an overwhelming desire for personal gain, high personal debt, a close association with customers, feeling pay was not commensurate with responsibility, a wheeler-dealer attitude, strong challenge to beat the system, excessive gambling habits, and undue family or peer's pressure. They also examined comprehensive data sources to assemble a complete list of pressure, opportunity, and integrity variables, resulting in a collection of 82 possible red flags of occupational fraud and abuse.

THEORETICAL FRAMEWORK

The theory that will guide this paper is the "theory of fraud diamond." Wolf and Hermanson (2004) introduced the fraud diamond model where they presented another view of the factors to fraud. The theory adds fourth variable "capabilities" to the three factor theory of fraud triangle. Wolf and Hermanson believed many frauds would not have occurred without the right person with right capabilities implementing the details of the fraud. They also suggested four observation traits for committing fraud:

- Authoritative position or function within the organization.
- Capacity to understand and exploit accounting systems and internal control
- Confidence that he/she will not be detected, or if caught, he/she will get out of it easily.
- Capability to deal with the stress created within and otherwise good person when he or she commits bad act.

Thus, forensic accountants have to keep in mind that pressure/motive to commit fraud can be either personal pressure, employment pressure, or external pressure and each of these types of pressure can also happen because of financial and non-financial pressure. Forensic accountants also need to understand the opportunity for fraud to help them in identifying which fraud schemes an individual can commit and how fraud virus occurs when there is an ineffective or missing internal control. The four factors to fraud as presented by Wolf and Hermanson (2004) in the fraud diamond are shown in figure 3 below:

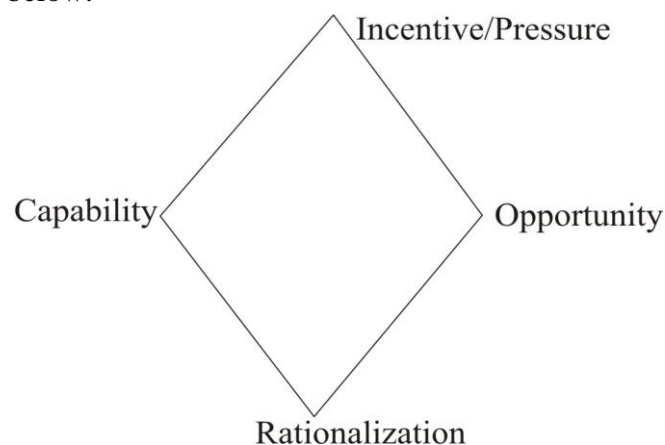


Figure 3: Fraud Diamond Model, Source: Wolf and Hermanson (2004)

However, it can be criticized that even though the fraud diamond added the fourth variable “capability” to the fraud triangle and filled the gap in other theories of fraud, the model alone is an inadequate tool for investigating, deterring, preventing and detecting fraud. This is because, the two sides of fraud diamond (incentive/pressure and rationalization) cannot be observed, and some important factors like national value system and corporate governance are ignored.

The research suggests another model called “New Fraud Diamond.” In this model, motivation of fraud perpetrators, which is one of the sides in the fraud diamond, may be more appropriately expanded and identified with the acronym: NAVSMICE that stands for NAVS – National Value System; M = Money; I = Ideology; C = Coercion; and E = Ego.

Our present National Value System in Nigeria is not good, little or no premium is put on things like honesty, integrity and good character. The society does not question the source of “wealth.” Any person who stumbles into wealth is instantly recognized and honoured. It is a fact of our time that fraud has its root firmly entrenched in the social setting where wealth is honoured without questions. Ours is a materialistic society which to a large extent encourages fraud. The desire to be with high and mighty caliber of the society’s extreme wants that is often characterized by need, cultural demands or cultivation of a life too expensive for the legitimate income of the individual.

The model also suggests the fraud scale to include personal integrity instead of rationalization and it is particularly applicable to financial reporting fraud where sources of pressure (e.g. analysts’ forecasts, management earnings guidance, a history of sales and earnings growth) are more observable. Personal integrity can be observable through observing both a person’s decisions as well as the decision-making process. The person’s commitment to ethical decision-making can be observed and this can help in assessing integrity and thus the likelihood of an individual committing fraud. The model further suggests corporate governance as the lock to all the factors that cause fraud to take place in Nigeria. An important theme of corporate governance is the nature and extent of accountability of people in the organizations. Corporate governance is the principle and value that guides an organization in the conduct of its day-to-day activities and how stakeholders interrelate among one another (Anandarajah, 2001).

Good corporate governance is the missing link in Nigeria, which is an index of fraud occurrence (Okoye, 2001). This situation can only change when the country achieves a positive change in the character and orientation of their government leadership. The leaders can bring this desired change by promoting good corporate governance in Nigerian economy through integrity, accountability and transparency, which would lead to attainment of strong internal control system in Nigeria and thus the likelihood of an individual committing fraud.

There is high level of corruption, fraud, mismanagement, embezzlement, dishonesty, lack of transparency, unaccountability, irresponsibility and indiscipline in Nigeria. In Nigeria, the indicator of good corporate governance is very low when assessed and evaluated. The institutions of government namely: the executive, judiciary and legislature could not provide for responsible governance. This is an indication that

good corporate governance is far-fetched and could lead to fraud in Nigeria (Nwankwo, 2011).

The kind of leaders required to promote good corporate governance in Nigeria are those leaders who possess strong character and principles founded in integrity, accountability and transparency. Such leaders must live above board, and most importantly, have strong mission and vision to attract the desired support from the citizens to reduce the occurrence of fraud in Nigeria (Nwankwo, 2011).

Nwankwo (2011) further says that no matter the extent any leadership may claim to be visionary and mission-oriented, the fact remains that if the regime cannot impact positively in reducing fraud occurrence in Nigeria, it is an indication of bad corporate governance. The desired leaders that can promote good corporate governance in Nigeria could be recruited through institution of the culture of integrity, accountability and transparency into the three arms of government: executive, legislature and judiciary. The implication here is that if there is good corporate governance in Nigeria, with all the threats and opportunities, fraud can be reduced in Nigeria.

The paper believes that, it is important for forensic accountants to consider all the fraud models to better understand why fraud occurs. Therefore, all other fraud models should be regarded as an extension to Wolf and Hermanson's Fraud Diamond and should be integrated in one model that includes motivation, opportunity, personal integrity, capabilities and corporate governance. This should be called "New Fraud Diamond Model." Hence, with the New Fraud Diamond Model, forensic accountants will consider all the necessary factors contributing to the occurrence of fraud. This should help them in effectively investigating and assessing fraud risk. The New Fraud Diamond Model is shown in figure 4 below:



Figure 4: The New Fraud Diamond Model

CONCLUSION

The current paper aims at broadening forensic accountants' knowledge about fraud and why it occurs. It explains Wolf and Hermanson's Fraud Diamond Model and shows its significance, presents Cressey's fraud triangle model and relates it to Wolf and Hermanson model and proposes a new fraud diamond model that forensic accountants should consider when assessing the risk of fraud. A thorough literature review was undertaken to achieve the aim of this paper. It can be concluded that forensic accountants need to understand the opportunity for fraud through the new

fraud diamond model to help them in identifying and investigating which fraud schemes an individual can commit and also in effectively assessing fraud risk.

CONTRIBUTIONS TO KNOWLEDGE

The study contributes to knowledge in the following ways:

- i. The study contributes to knowledge by bridging the gap in the existing literature through the introduction of the “New Fraud Diamond Model” which tends to consider all the necessary factors associated to fraud occurrence.
- ii. The study adds to the body of existing knowledge and a guide for researchers to further research on the subject matter in areas that will not be addressed in this study.

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