Forensic Accounting and Fraud Risk Factors: The Influence of Fraud Diamond Theory

Rabi’u Abdullahi      Noorhayati Mansor
Universiti Sultan Zainal Abidin, 21300 Kuala Terengganu, Malaysia

Abstract
Fraud has become a global phenomenon which attracts the attention of the world’s business organizations towards using the services of forensic accountants in order to identify the fraud risk factors so as to detect and prevent fraud occurrences. This paper aimed to identify the fraud risk factors by forensic accountants with the effect of FDT. The use of FDT by forensic accountants will eliminate the phobia of fraud incidences in organizational settings and equally shaped the organization’s thinking to develop a sound and effective detection and preventive measures. The paper generally reviewed literatures which take the nature of conceptual approach. The information used for the study was obtained from journal articles, textbooks and the internet. Therefore, the discussion of the fraud risk factors will immensely contributes to the understanding of FDT and fraud red flags especially by the government, forensic accountants, auditors, fraud examiners and other anti-fraud bodies as well as the private business owners. The study also serves as guidance for further fraud related research.

Keywords: Fraud, white collar crime theory, fraud triangle, fraud diamond, forensic accounting, red flags

1.0 Introduction
Fraud has become a global phenomenon as well as order of the day up to the extent that no single country at a federal, state or local government level as well as private and or public sector can proudly point finger on air to claim zero fraud. But the level of fraud varies from one country to another and from one organization to another. Forensic accountants requires financial information and will need to understand, interpret, discern what is important or not so important, retrieve, identify, safeguard, report, and testify in court financial information retrieved in a fraud investigation (Kahan 2005; Manning 2005, Wells, 2005 in Bressler 2007). The National Public Procurement Integrity Baseline Survey (2006) estimated that 18-20 billion dollars budgeted loss due to procurement related fraud at local government level. According to Savuth (2012), fraud and corruption pose serious threat to the world economy considering the amount of money lost every year.

It has been agree by the researchers, academicians and practitioners on the importance of forensic accountants’ understanding the elements of fraud which include opportunity, incentive, and rationalization (i.e FTT) (Buckhoff, 2004; Houck et al., 2006). Wolfe and Hermanson, (2004) also believe in the importance of the FDT in identifying and assessing the risk of fraud occurrence. Forensic accountant should be familiar with the four-sided fraud diamond which considered an individual’s capability in addition to discussing the fraud diamond that offered different ways to think about fraud risks (Bressler 2007). Wolfe and Hermanson, (2004) noted that fraud examiners should not underestimate the fraud perpetrator because the perpetrator would be smart enough to understand and take advantage of internal control weaknesses (Fiore, et al., 2005 in Bressler 2007). Forensic accountant’s understanding of AIS would be of utmost important when investigating fraud and who in the organization might be capable of bypassing or removing financial red flags from the AIS system (Bressler 2007, Kranacher and Stern, 2004 and Weber, 1999). In order for forensic accountants to be able to identify fraud risk factors, there is a need for them (forensic accountants) to be well trained in the areas of investigation, detection, prevention in various specialized techniques. The forensic fraud investigators will be experienced accountants (Bressler 2007). Harris and Brown (2000) suggested that a forensic accountant should be able to demonstrate specialized skills in rules of evidence and the law, analytical and investigative skills, identification of patterns of abuse, excellent interpersonal and communication skills, and outstanding organizational skills. This paper discussed the issues of forensic accountant’s efforts of identifying the fraud risk factors with regard to FDT base on three sections as follows: section 1 discusses the concept of fraud and forensic accounting and section 2 gives details of the classical theories as WCCT, FTT and FDT. Lastly, section 3 presents the likely fraud red flags as the key indicators to fraud risk in an organisation. Furthermore, conclusion is drowning as well as contributions and suggested areas for future researches.

2.0 LITRATURE REVIEW
2.1 Concept of fraud
The Institute of Turkish History explains the word fraud as “a deceptive trick, scam, game, artifice, cabal which is committed to cheat, mislead someone” and “contributing something useless to something in order to gain advantage” (Institute of Turkish History 1998:995). Fraud is “to create a misjudgement or maintain an existing misjudgement to induce somebody to make a contract” (Arzova 2003:118). Russel (1978) in Chi-Chi and Appah (2011:125) and Bello (2001) remarks that, the term fraud is generic and is used in various ways. Fraud assumes so
many different degrees and forms that courts are compelled to context themselves with only few general rules for its discovery and defeat.

Bozkurt, (2003) and Arzova, (2003) in Augustine and Famous (2013) argued that, fraud is most likely to involve deliberate misrepresentation of information that is recorded and reported by an entity. Fraud poses a serious problem from an audit perspective because it is normally accompanied by efforts to cover, falsify or misdirect organization’s records and reports. Most corporate frauds are complex in nature and difficult to detect by traditional auditors, as they cannot provide absolute assurance of their detection. This is because of the auditors “use of judgment, sample testing and the fact that evidences available to them are persuasive rather than conclusive in nature” (ISA, 2009:15). Albrecht, (2005) in Enofe and Atube (2013:65) argued that fraud is rarely seen. He continues to state that, the symptoms of fraud are usually observed. The symptoms do not necessarily mean fraud is being undergone as it may be caused by mistakes. According to Anyanwu (1993) in Onuarah et, al (2012:123) fraud is an act or course of deception, deliberately practiced to gain unlawful or unfair advantage; such deception directed to the detriment of another. Duffield and Grabosky (2001) as quoted by Gary, Seow, Suwardy and Gay (2011:139) defined fraud as an act involving deceit (such as intentional distortion of the truth or misrepresentation or concealment of a material fact) to gain an unfair advantage over another in order to secure something of value or deprive another of a right. It occurs when a perpetrator communicates false statements with the intent of defrauding a victim out of property or something of value (Vasiu and Vasiu, 2004). Mukoro, et al (2011:235) quoting Edafehirhaye and Edafehirhaye (2008) defines fraud as “tendency and propensity to do what is wrong, evil or harmful to one’s neighbouring spite of the knowledge of what is good. It is an attempt of subverting the rule of the game using trick to take public fund and using them for one’s personal interest”.

2.2 Types and Classification of Fraud

Association of Certified Fraud Examiners (2012) reported that fraud has been divided into three major categories as follows: corruption, assets misappropriation, and financial statement fraud. From the existing cases, there are many ways that fraud can be perpetrated from the simple misuse of trust to the sophisticated computer based offence.

Anyanwu (1993), Ajide and Ezi (2000), Karwai (2002), Okafor (2004) and Adeniyi (2004) quoted by Onuarah et, al (2012:125) summarize the types of fraud on the basis of methods of perpetration include the following but not exhaustive as the methods are devised day-in-day out. These include defalcation, suppression, outright theft and embezzlement, tampering with reserves, insider abuses and forgeries, fraudulent substitutions, unauthorized lending, lending to ghost borrowers, kite flying and cross firing, unofficial borrowing, impersonation, teeming and lading, fake payment. They further mentioned fraudulent use of the firms documents, fictitious accounts, false proceeds of collection, manipulation of vouchers, dry posting, over invoicing, inflation of statistical data, ledger accounts manipulation, fictitious contracts, duplication cheque books, computer fraud, misuse of suspense accounts, false declaration of cash shortages among others. The various forms of fraud include Bribery and extortion; Fraud and embezzlement; Unlawful use of public assets for private advances; Over- and Under-Invoicing; Payment of salaries and other benefits to ghost (non-existent) workers and pensioners; Payment for air supply (goods or services not supplied or rendered) (Singleton, Bologna, and Lindquist 2006).

Under-payment of taxes and duties on exports and imports through false invoicing or other declarations; inflation of prices of goods purchase; Embezzlement of assets; court pronouncements awarding financial compensations well in excess of any damage suffered; deletion of documents or the whole case files; favouritism and patronage. Fraud may be categorized into Corporate, Management Fraud and fraud as a tort. Corporate fraud on the other hand is any fraud perpetrated by or against a business corporation (Singleton, et al. 2006).

2.3 Concept of forensic accounting

Coenen (2005) stated that forensic accounting involved the application of accounting concepts and techniques to legal problem. It demands reporting, where the accountability of the fraud is established and the report is considered as evidence in the court of law or in the administrative proceedings (Joshi, 2003). Forensic accounting is the “integration of accounting, auditing and investigative skills” (Zysman, 2004:2). It provides an accounting analysis that is suitable to the court, which will form the basis of discussion, debate and ultimately dispute resolution (Zysman, 2004:2).

Howard and Sheetz (2006) viewed forensic accounting as the process of interpreting, summarizing and presenting complex financial issues clearly, succinctly and factually often in a court of law as an expert. Forensic accounting is the specialty area of accountancy profession which describes engagements that result from actual or anticipated disputes or litigation. "Forensic" means "suitable for use in court of law" and it is to that standard and potential outcome that forensic accountants generally have to work (Crumblly et al 2005). Wells (2004) as quoted by Okoye and Gbegi (2013) pointed out that large accounting firms have forensic accounting staff but they are use reactively rather than proactively. Wells (2004) recommended that forensic accounting should be used during the audit to help identify key fraud risk areas, and communicate them to the auditors for further consideration. Wells
argued that the presence of deterrent to fraud-inclined client for there would be a perception that the likelihood of illegal activities being detected would increase.

3.0 Theoretical Review

3.1 White Collar Crime Theory (Sutherland 1939)

Edwin H. Sutherland was the pioneer of White collar crime theory which became part of the English language when he gave a Presidential Address to the American Sociological Society in 1939. Sutherland's talk, "The White Collar Criminal", rejected traditional theories of crime which blamed poverty, broken homes, and disturbed personalities as the source of committing white collar crime. He noted that many of the law breakers in business were far from poor, from happy family backgrounds, and all too mentally sound. After ten years of further research, Sutherland published White Collar Crime (1949 in Braithwaite 1986). A revised version was published in 1983. Sutherland (1983:7 in Braithwaite 1986:4) defined white collar crime as "a crime committed by a person of respectability and high social status in the course of his occupation." Sutherland called attention to the fact that crimes were not committed only by members of the lower class but including those of the upper class.

Sutherland was much-admired and criticized on the appeal made to social scientists to expand their focus to include crimes by upper class offenders. Furthermore, the way that Sutherland defined and studied white-collar crime was widely criticized by a host of social scientists and legal experts. Much of the criticism galloped around five concerns that scholars had about Sutherland’s use of the white-collar crime concept. These concerns included (i) conceptual ambiguity, (ii) empirical ambiguity, (iii) methodological ambiguity, (iv) legal ambiguity, and (v) policy ambiguity.

Despite the tremendous criticism faced by Sutherland on the proposition of WCCT, his work did not fall in vain. Two young scholars, Marshall Clinard and Donald Cressey later became famous in criminology and quickly shouldered Sutherland's work. In 1952, Clinard authored a book on price control violations during World War II and Cressey 1953 wrote Other People's Money, a study of embezzlement (Braithwaite 1986:5).

3.2 Fraud Triangle Theory (Donald R. Cressey 1950)

FTT was developed as an idea to investigate the causes of fraud. It was first coined by Donald R. Cressey (1950) called the FTT (Cressey 1953 in Manurung and Hadian 2013:5). Cressey in 1950 was troubled with the question of why people commit financial crime; this is what gives him courage to examined 250 criminals in a period of 5 months. Cressey conclude that:

“Trust violators, when they conceive of themselves as having a financial problem which is non-shareable, and have knowledge or awareness that this problem can be secretly resolved by violation of the position of financial trust. Also they are able to apply to their own conduct in that situation verbalizations which enable them to adjust their conceptions of themselves as trusted persons with their conceptions of themselves as users of the entrusted funds or property” (Cressey 1953:742).

Figure: 1 Fraud triangle
Source: Cressey 1953 in Manurung and Hadian 2013

FTT describes three factors that are present in every situation of fraud as follows:

1. Perceived pressure, incentives / pressures: This is the initial cause of committing fraud. Pressure can include almost anything which will motivate individual to commit fraud including lifestyle, economic demands, and others
2. Perceived opportunity: This is the ability of a fraudster to discover and exploit organisational weaknesses to violate trust. Opportunities created by the internal control weaknesses; poor corporate governance; lack of job rotation and poor supervision among others. According to SAS 99, the chances of financial statement fraud can occur in three categories of the condition. (i) the nature of the industry (ii) ineffective monitoring and (iii) organizational structure.

3. Rationalization: This is the attitude, character or set of ethical values that allow certain party (ies) to commit acts of fraud, or different people in an environment that makes them quite hit rationalize fraudulent actions. (Skousen et, al. 2009). Rationalization can also be a process through which a fraudster justifies his evil course of action. Cressey’s findings reveal that all the three elements (perceived pressure, opportunity and rationalization) must be present for a fraudster to be able to violate trust in an organisation (Cressey 1953)

3.3 Fraud Diamond Theory (David T. Wolfe and. Dana R. Hermanson 2004)
The FDT is an extension of FTT which was made by David T. Wolfe and. Dana R. Hermanson in 2004. They believed that the FTT could be enhanced to improve both fraud prevention and detection by considering an additional element “capability”. In addition to addressing, perceived pressure, perceived opportunity, and rationalization, Wolfe and Hermanson (2004) considered an individual’s capability. This includes personal traits and abilities that play a major in whether fraud may actually occur even with the presence of the other three elements (Wolfe and Hermanson 2004 in Tugas 2012) FDT can be illustrated using Figure 2

![Fraud Diamond Diagram](image)

**Figure: 2 Fraud diamond**

**Source:** Wolfe and Hermanson 2004

The FDT was first published in CPA Magazine in December 2004. The recognition of the element of capability has involved the six factors expected to be achieved by the fraudsters as suggested by Wolfe and Hermanson (2004).

(i) A fraudster must have *function or authority* for him to be able to commit fraud.
(ii) The fraud perpetrator must be *intellectual* to the extent that he/she can be able to harness and exploit organisational weakness to commit fraudulent action.
(iii) Fraudster must be *egoistic* and have strong confident and courage as he will not be caught.
(iv) The fraud perpetrator must be a person who can *coerce and pursued* other to commit fraud by themselves or together with him.
(v) Fraudster must be a person who can be able to *deceive* others or look at people into their eyes to
convincingly and comprehensively tell them lie.

(vi) A fraudster must be able to conquer the stress by withholding and hiding the true face of the matter as well as frequent monitoring the issue in order to prevent detection.

Wolfe and Hermanson (2004:38) state that “Opportunity opens the doorway to fraud, and incentive (i.e. pressure) and rationalization can draw a person toward it. However, the person must have the capability to recognize the open doorway as an opportunity and to take advantage of it by walking through, not just once, but repeatedly”.

4.0 Red Flags (Signs of Fraud Risk)

According to DiNapoli (2010:3) “red flag is a set of circumstances that are unusual in nature or vary from the normal activity. It is a signal that something is out of the ordinary and may need to be investigated further”. Red flags do not indicate guilt or innocence but merely provide possible warning signs of fraud.

Red flags are symptoms or signs of fraud occurrence, which frequently found in the organizations with weak management structure. Even though they (red flags) cannot be considered as a definite proof of fraud or not, but these symptoms can indicate the signs of fraud in financial statements report (Dzamba, 2004:12). Red flags may be defined as “potential symptoms existing within the organizational environment that would indicate a higher risk of an intentional misstatement of the financial statements” (Price Waterhouse, 2010:31). DiNapoli (2010:3) states that considering the importance of red flags, international accounting institutions use them in their regulations as they have signs about fraudulent activities. The Statement on Auditing Standards (SAS) No. 82, The Consideration of Fraud in a Financial Statement Audit, which superseded SAS No. 53, was one of the first statements that identified 25 fraud risk factors (red flags) for auditors. SAS No. 99 (AICPA, 2002) that requires auditors to use 42 red flags in financial statement audits to detect fraudulent financial reporting later replaced this standard. The list of red flags found in SAS No. 99 is organized based on the fraud-triangle concept, which involves the interaction of the following three factors: incentive, opportunity, and attitude.

4.1 Opportunity Red Flags

• Close association with suppliers and other key people within and outside the organization
• An organization that does not inform employees about the rules or the action taken to combat fraud
• Rapid turnover of key employees either by quitting, firing and retiring
• No mandatory vacations, periodic rotations, or transfers of key employees
• Inadequate personnel-screening policies when employing new employees to fill positions of trust
• An absence of explicit and uniform personnel policies
• No maintenance of accurate personnel records of dishonest acts or disciplinary actions
• Lack of executive disclosures and examinations
• A dishonest or overlapping of duty by the dominant management
• Operating on a crisis basis
• Lack of supervision and attention paid to details of the job
• Poor compensation scheme
• Inadequate training programs
• Related party transactions
• A complex organizational structure
• Lack of effective internal auditing staff
• An organization that uses several different auditing firms or changes auditors frequently
• An organization that is reluctant to give auditors needed data
• An organization that uses several different legal firms or changes legal counsels repeatedly
• An organization that uses an unusually large number of different banks, none of which can see the entire picture
• Continuous problems with various regulatory agencies
• Large year-end and/or unusual transactions or unbalanced transactions
• An inadequate internal control system or no enforcement of the existing internal controls
• Poor accounting records and inadequate staffing in the accounting departments
• An organization that is inadequately discloses questionable or unusual accounting practices
• Too much familiarity with operations

4.2 Personal Characteristic (Rationalization) Red Flags

• An employee’s contradictory behaviour
• Lack of a strong code of personal ethics
• A wheeler-dealer personality
• Lack of stability
• A strong desire to beat the system
• A criminal or questionable background
• A poor credit rating and financial status

4.3 Situational Pressure Red Flags
• High personal debts or financial losses
• Inadequate income for lifestyle
• Excessive gambling
• Undue family, organization, or community expectations
• Excessive use of alcohol or drugs
• Perceived inequities in the organization
• Resentment of superiors and frustration with job
• Peer group pressures
• Undue desire for self-enrichment and personal gain
• Emotional trauma in home life or work life

4.4 Capability Red Flags
• Having exercising an excessive power
• Job or work overlapping
• Too much power to coerce other employees
• Ability to pursued others
• Too much resistance to stresses
• Ability to convincingly deceive and tell lies
• Too much egoism and over confidence
• Specialization in one function for long duration

5.0 Contribution and Area for future research
The study contributes to the existing body of knowledge by identify the possible fraud risk factors through the influence of FDT and also the study may serve as a source of academic literature. Furthermore, the study will help the government, private business owners, forensic accountants, auditors, fraud examiners and other anti-graft bodies to understand the fraud risk factors thoroughly and to develop suitable mechanisms for investigating, detecting and preventing fraud occurrence.

The study may serve as guidance for future research in the subject matter where the study did not address. Therefore, the future researchers may intend to conduct a study in relation to the impact of red flags in preventing financial fraud. This is because red flags are the indicators of the symptoms or a sign of fraud in an organization even though it does not indicates the fraudster as a guilty or not but rather an alert of the fraud occurrence.

6.0 Conclusion
Fraud investigation, detection and prevention are some of the main responsibilities of forensic accountants. Now a day, it has been a serious issue the high level or rate at which fraud is growing in the business organization, as such it makes significant way to examines and identify the related fraud risk factors in this paper. The fraud risk factors have been a grim problem to address by the forensic accountants and to develop efficient red flags to curve the cases of fraud incidences in the world’s business organization. This paper discusses on the forensic accounting and fraud risk factors using one of the classical fraud theory (FDT). It clearly itemised some of the fraud red flags which will be helpful in preventing fraud after thoroughly discuss the concept of fraud and forensic accounting. Considering the nature of the fraud occurrences and the way the fraudsters perpetrates fraud through their power and capability to deceive and tell lies causes by their perceived pressures and perceived opportunities as well as method used to rationalised their evil actions this paper will be supportive to mitigates trust violations.

References