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The Role of Auditing in the Management of Corporate Fraud

Kamil Omoteso and Musa Obalola

Introduction

A business risk is considered to be anything that has the potential to prevent a business organisation from achieving its corporate objectives the foremost of which is shareholders' wealth maximisation. From a broader perspective, a modern business will be concerned about a wide range of business risks. These include those associated with competitors' activities (strategic risks), current and emerging legislations (compliance risks), debt financing and trade creditors (financial risks), purely externally-related issues (environmental risks) and day-to-day running of the entity (operational risks). Corporate fraud is a type of operational risk faced by businesses today. Although such fraud is as old as the existence of modern corporations, its frequency of occurrence and sophistication level have made it a matter for concern to both owners and managers of business enterprises. According to the latest ACFE's Report to the Nations on Occupational Fraud and Abuse (ACFE's Report, 2012), 77% of the global corporate fraud are perpetrated by employees in six main units of corporations (top management, accounting, operations, sales, purchases and customer services). Also, "*reactions to recent corporate scandals have led the public and stakeholders to expect organizations to take a "no fraud tolerance" attitude. Good governance principles demand that an organization's board of directors, or equivalent oversight body, ensure overall high ethical behaviour in the organization...*" (The IIA et al., 2012).

Examples of latest corporate fraud include some HSBC staff at its global subsidiaries laundering billions of dollars for drug cartels, terrorists and pariah states (Rushe, 2012), three senior businessmen (John Maylam of Sainsbury's, John Baxter and Andrew Behagg of Breenvale) jailed for siphoning almost £9 million from Sainsbury's in a corrupt potato deal (Ward, 2012), the Citigroup's mortgage-insurance fraud case involving two executives of the bank which "resulted in a $158.3 million settlement and an admission of wrongdoing by the bank" (Griffin and Ivry, 2012), Japanese electronics giant, Olympus's admission that it concealed investment losses of £1.1 billion from the 1990s (Thomas, 2012) and Barclays manipulation of the London Interbank Offered Rate (LIBOR) and the Euro Interbank Offered

Rate (EURIBOR) for which the bank was fined an unprecedented £59.5 million by the UK's Financial Services Authority (FSA, 2012). Some other forms of modern corporate fraud schemes include bankruptcy fraud, tax fraud, stock fraud, embezzlement, bribery, forgery, conspiracy.

Furthermore, there "*has been all too evident in recent years, investigations of corporate debacles ... frequently uncovered instances of serious fraud and/or other malpractice by senior company officials, reckless financial and business management practices and/or ingenious creative accounting*" (Porter, 2009: 156 – 157) and these horrible malpractices have been traced to weak corporate governance systems particularly in terms of codes, structures and functioning. As a result, most of the post-Enron governance codes emphasise the need for an effective internal control system that can prevent the abuse of companies' assets or properties by corporate fraudsters. In addition, these codes place emphasis on good corporate governance that supports sound business risk management system as well as responsible and reliable financial reports that can satisfy all the stakeholders. For such good corporate governance to be attainable, Rezaee (2003) recommended a "six-legged stool" model comprising the active and transparent participation of the board of directors, the audit committee, the top management team, internal auditors, external auditors and regulatory bodies. This, he suggested, will provide a holistic solution to the governance problems (which give rise to the incidence of fraud) facing business establishments across the world. It is noteworthy that half of the Rezaee's proposed stool's six legs revolve around auditing.

This chapter therefore adopts Porter's "audit trinity" approach (which comprises internal audit, external Audit and the audit committee – the tripartite audit function) to discuss the role auditing can play in the management of corporate fraud through its preventive and detective capabilities. The chapter traces the historical background of external audit as an assurance service for the shareholders who have hired management experts to look after their businesses for them (the shareholders). In addition it maps the developments in the internal audit function as well as the emergence of the audit committee as a modern corporate governance and accountability umpire. It highlights different roles these three audit types can play in controlling corporate fraud and the relationships that should exist between them in order to support a sound internal control system as a tool for preventing and detecting corporate fraud. The chapter also discusses how internal controls and continuous online

auditing approach can be used to manage corporate frauds within computerised business environments.

Background to the Tripartite Audit Function

Although auditing as a profession began in the UK in the mid-19th century, by the mid-20th century, the US had taken the front seat in driving its development, a position it still retains till today due to its high number of very large corporations. Between its inception and the current period, the main goal of auditing (external audit) had metamorphosed from the initial sole aim of fraud detection to multiple objectives comprising a certificate on the credibility of management's annual reports and accounts, providing management advisory services, reporting doubts about an entity's ability to carry on trading and helping to secure responsible corporate governance – For a further overview of the historical developments of auditing, see Porter et al. (2003: 18 – 38).

Depending on those regarded as its main beneficiaries, an audit can be categorised as external audit or internal audit. An external audit requires independent experts to conduct an audit for the benefit of parties external to the audited entity while an internal audit is carried out by either employees of an entity or contracted personnel for the benefit of the entity's management.

According to Omoteso (2006: 13), an external audit is an independent examination of the evidence upon which the financial statements of an entity are based, to generate an opinion as to whether the financial statements represent a 'true and fair view' and have been prepared in accordance with the applicable reporting framework. However, Cosserat, 2004: 666 defined internal audit as "*an appraisal or monitoring activity established by management and directors, for the review of the accounting and internal control systems as a service to the entity. It functions by, amongst other things, examining, evaluating and reporting to management and the directors on the adequacy and effectiveness of components of the accounting and internal control systems*".

The internal audit function within an organisation is responsible for monitoring the adequacy and the effectiveness of an entity's internal control systems. It is also usually charged with

issues relating to an organisation's risk management and other aspects of governance. However, compared to external audit, internal audit is relatively new. It emerged as a service to the management and its importance, particularly to large organisations in ensuring good corporate governance and accountability, is very significant in modern day business. Further distinctions between external and internal audits are contained in the table below:

Table 1: Differences Between External and Internal Audit

	External Audit	**Internal Audit**
Independence	Independent of entity	Employed by management
Responsibilities	Fixed by relevant statutes	Decided by management through the audit charter
Accountable to	Members/owners	Management/audit committees
Watchdog role	Society's corporate watchdog	Internal corporate watchdog
Scope of work	Express an opinion on the truth and fairness of financial statements prepared by the directors/management for presentation to shareholders	Review whatever financial and operational areas management decides
Regulated by	Professional accounting bodies/government statutes	The Institute of Internal auditors

Despite the foregoing differences between external and internal audits, both forms of audit are substantially based on systematic assessment of evidence to draw some final conclusions that are often presented in the form of reports. Furthermore, International Standard on Auditing (ISA) 610 stipulates that external auditors must obtain a sufficient understanding of the work carried out by internal auditors to help in the planning and development of an effective audit approach.

The third arm of auditing is the audit committee. It is the latest of the three arms to be institutionalised. Although the US's Securities and Exchange Commission had accorded recognition to the audit committee as far back as 1940s, its functions and roles only rose into

prominence in the 1970s when it was made a requirement for board of directors of all listed companies to in the US and the UK. In the US, the post-Enron corporate governance code, Sarbanes Oxley Act (2002) further entrenched the role of audit committees in its Section 301.

As a form of description, Rezaee (2009: 120) defined the audit committee as "*a committee composed of independent, non-executive directors charged with oversight functions of ensuring responsible Corporate Governance , a reliable financial reporting process, an effective internal control structure, a credible audit function, an informed whistleblower complaint process and an appropriate code of business ethics with the purpose of creating long-term shareholder value while protecting the interests of other stakeholders".*

By regulation, the audit committee must necessarily include, at least, a member with background in accounting. The committee should be effective enough to be able to assess and respond to risks of fraud particularly those frauds that may involve the management and other employees. It also monitors management's activities relating to fraud prevention and detection and also oversees and liaises with internal and external auditors in matters relating to fraud. It regularly reviews the works of management and the internal audit function for all risk exposures including the risk of fraud. In addition, if necessary, the committee seeks legal advice on fraud related issues.

Auditing and Risk

The external auditor is statutorily required to assess the correctness of management assertions made in the financial statements. However, in order to be able to examine the fairness of these assertions, the auditor carries out audit procedures in the forms of risk evaluations and tests of accounting information based on credible audit evidence (Omoteso, 2013). The four popular approaches through which external auditors carry out their work are the substantive procedures approach, the balance sheet approach, the systems-based approach and the risk-based approach. None of these four audit approaches is capable of single-handedly ensuring a perfect audit. Therefore, an auditor is expected to adopt more than one approach in order to avoid an audit failure. Although the audit approach an auditor adopts will depend on the

nature and the circumstances of an audit engagement, of these four approaches, the systems-based and the risk-based approaches are more generally adopted.

Under the systems-based audit approach, external auditors evaluate an organisation's internal controls systems' effectiveness and, based on the results of this evaluation, focus their substantive procedures on the weak areas in which they assume control objectives may not be achievable. On the other hand, the risk-based approach to auditing emphasises directing audit resources towards the aspects of the financial statements that are susceptible to misstatements – either fraudulent or erroneous. ISA 315, "Identifying and Assessing the Risks of Material Misstatement through Understanding the Entity and Its Environment" compels auditors to adopt a risk-based approach (which is also referred to as business risk approach as it encompasses risks such as financial risks, compliance risks and operational risks). The standard requires auditors to carry out risk assessments of material misstatements at both the financial statement and assertion levels through auditors' understanding the risk involved in the entity's routine activities and environments (which include its internal control systems). Based on a comprehensive understanding of an entity and its environment, the auditor assesses risks within the organisation paying particular attention to the nature of the risks, relevant internal controls, and the desired level of audit evidence. According to Fraser (2011: 1), *"the result of the assessment effectively categorises the audit into (a) areas of significant risk of material misstatement that require specific responses and (b) areas of normal risk that can be addressed by standard audit work programs. Having assessed risks, the auditor then designs appropriate audit responses to those risks in order to obtain sufficient appropriate audit evidence on which to conclude"*.

Another dimension to risk in auditing is what is termed audit risk – "*the risk that the auditor expresses an inappropriate audit opinion when the financial statements are materially misstated. Audit risk is a function of material misstatement and detection risk"* (IAASB, 2009). The audit risk model is a product of three types of risks. These are inherent risk (the susceptibility of an assertion to a misstatement e.g. provisions), control risk (the risk of misstatements in an assertion not being prevented, detected or corrected by internal control systems) and detection risk (the risk that the auditor's procedure will not detect a misstatement in an assertion).

Apart from adopting the right audit approaches, an external auditor is required to adopt 'professional scepticism' in carrying out the audit assignment. This implies that regardless of previous years' standards and quality, the auditor considers the possibility of material fraudulent/erroneous misstatements by management in the current year's accounts. With this objective and an open mindset, the auditor will be alert to uncover any significant anomaly.

As regards the internal audit function, risk management responsibilities on behalf of the management remains one of its three key functions (the other two being governance and control). This role requires internal auditors to work hand in hand with directors on the one hand and the audit committee on the other in designing, executing and reviewing risk policies and programmes within an organisation for organisational effectiveness.

Corporate Fraud and Auditing

The incidence of corporate fraud has reached an alarming level across the world. According to Hopwood et al. (2008), based on available statistics, business organisations in the United States lose hundreds of billions of dollars per year to fraud. Yet, most frauds against organisations are never reported to law enforcement authorities either because they involve only few hundred or thousand dollars or in order to avoid negative publicity and legal liability on the part of the companies concerned. Besides, such frauds can sometimes be hard to prove without a confession. In the context of corporate organisations, a fraud will possess the following elements: it is intentional; it involves deception or concealment by the culprit; it leads to deprival or loss to the corporation (victim); and it accords a dishonest advantage to the culprit over the victim. Corporate fraud schemes include but not limited to the following:

- Assets misappropriation which is regarded as the most common (representing 87%) but least costly form of corporate fraud globally (The ACFE's Report, 2012).
- Accounts receivables frauds which comprise fraudulent credit approvals, improper credits and improper write-offs.
- Expenditure cycle frauds which consist of improper purchases and payments, unauthorized purchases, fraudulent purchases to related parties, misappropriation of petty cash, abuse of company credit cards or expense accounts, unauthorised

payments, theft of company cheques, fraudulent returns, theft of inventory and other assets and payroll fraud.

- Production cycle fraud involves theft of raw materials and finished goods.
- Vendor Frauds involving short shipments, balance due billing, substandard goods and fraudulent cost-plus billing (Hopwood et al., 2008).

According to Hopwood et al., possible reasons for corporate fraud include the following:

- Poor employee compensation: Employees could steal to make up for what they think the company owes them.
- Excessive pressure to perform: This can generate hostility toward the company, providing rationalizations for employees to cheat customers, vendors, and the company itself and to violate health and safety laws and regulations.
- Hostile work environment: This situation can generate animosity towards the company, which can be a rationalisation to commit fraud.
- Corporate financial troubles: Financial disorder tends to produce general chaos within the company, leading to a wide range of problems including employee dishonesty.
- Negative examples set by top management

As most corporate frauds involve companies' misappropriation of companies' assets such as funds and similar valuables (The ACFE's Report, 2012), the role of accountants and, hence, auditing in the prevention and detection of fraud cannot be stressed too strongly. From the points of view of Lee (1993: 9) auditing can be regarded as *"a social mechanism to assist in monitoring and controlling corporate managerial behaviour, and as a political tool of the state which attempts to explicitly signal its desire to provide a means of corporate governance. Economically, the corporate auditor is observed as an agent in an agency situation, acting as an adjudicator in contractual relationships involving potential conflict and moral hazard."*

From the agency theory perspective, just as the management, auditors are another form of agents of the shareholder as they are hired, remunerated and can be fired by the shareholders. They also report and are responsible to the shareholders. Nevertheless, the difference between these two sets of agents is that while directors run the company on a day-to-day basis presumably in the best interests of the shareholders, render accounts of their stewardship in the form of annual reports and accounts at the annual general meeting and take steps to prevent fraud by setting up a sound internal control system, auditors are:

- required to report to shareholders on the truth and fairness of the financial statements prepared by the directors which reflect the directors' stewardship of the shareholders' company during the year,
- required to assess the financial statements for full disclosures required by accounting standards and company law but
- not responsible for detecting fraud except where fraud is so large that it would affect the 'true and fair view' of the financial statements being audited (Omoteso, 2013).

According to Taylor (2011: 33), "*the general public and the uninformed, which often sadly, includes financial journalists who should know better, often labour under the decision that one of the primary functions of [external] auditors is to detect fraud. For example, when questioned, ordinary members of the public think that auditors check all the transactions in the books, or prepare the accounts; they have little understanding of risk-based audit techniques or systems-based approaches to auditing – and who can blame them?*"

In addition, had it been made as part of their responsibilities, it would have been a very difficult task for external auditors to be able to play a major role in fraud detection based on the following:

1. External auditors drawing their conclusions based on samples because of constraints of time and resources

2. It will be difficult for external auditors to uncover high level and methodically co-ordinated fraud schemes particularly when such schemes involve top managers.

3. Limited knowledge of the organisation and its staff

Humphrey (1997) commented that the audit expectations gap arises mainly as a result of auditors' failure to detect and report fraud and errors when that is what the public expect them to do. Despite the emphasis made by ISA240 – 'the auditor's responsibilities relating to fraud in an audit of financial statements' – on management's overall responsibility for fraud prevention and detection (in a way that should clarify the popular misconception on auditors' duties regarding fraud), it is generally expected that external auditors' procedures should be effective in uncovering material misstatements arising from either financial statements fraud or assets misappropriation and the subsequent alteration of accounting records.

Furthermore, since the demise of the defunct Arthur Andersen (one of the then "Big5" accounting firms) brought about by the firm's complicity in the Enron scandal in the US, audit firms have frequently been criticised for not being able to detect significant (material) corporate frauds. For example, this was evident in the case of Olympus mentioned above where their auditors within the period, KPMG and Ernst and Young, were severely criticised. In the opinion of Mathiason (2009:1): "*.... as bankers take a kicking from an increasingly irate public, auditors have avoided anger, even though they signed of trillion-dollar balance sheets, sanctioned increased dividends in the bank shares that collapsed months later, blithely assumed markets would function seamlessly and established controversial rules that inflated bubbles and amplified losses. ... The fact that auditors have not been brought to book for their role in the crisis is causing frustration and alarm to a growing number of politicians, regulators, fund managers and academics.*"

Conversely, auditors continue to put forward the argument that due to limitations of personnel and time as well as the imperative of sampling techniques, audit regulation/standards only require them to provide a reasonable (rather than an absolute) assurance on an entity's financial statements. In addition, they (external auditors) often argue that they only work on historical data financial records that are one year in arrears and this makes it difficult to uncover current fraud or to accurately predict future losses/problems. However, Taylor (2011: 36) concluded that although "*it is acknowledged that external auditors have no direct responsibility for the detection of fraud but it is still part of the public perception that this is one of their principal functions. Thus, the success of the audit profession in detecting and deterring [cases such as those of] Madoffs and Stanfords is highly relevant to the overall impression the investing public has of business probity*".

While external audit may be “very poor at catching fraudsters” and constitutes a “weak deterrent to fraud” (Taylor, 2011: 33), the internal audit function is principally aimed at designing, implementing and monitoring an effective system of internal controls capable of preventing and detecting frauds and errors, hence, dubbed by Porter (2009) as the ‘internal corporate watchdog’. Notwithstanding the provisions of the Institute of Internal Auditors (IIA) which state the internal audit function is not directly responsible for fraud detection, the IIA requires internal auditors to investigate the causes of fraud, review fraud prevention and detection processes, facilitate corporate learning about fraud and hiring specialists for fraud investigations (Taylor, 2011: 44).

However, in reality, the management and those in charge of governance within the organisation are directly responsible for fraud prevention, detection and deterrence. These may be carried out through the internal audit function as a control mechanism within the organisation while the audit committee performs an important oversight role towards ensuring the effectiveness of the internal audit function.

Financial Statement Fraud and Auditing

Financial statement fraud (FSF) is any undisclosed intentional or grossly negligent violation of Generally Accepted Accounting Principles (GAAP) that significantly affects the information in a set of financial statements. The Committee of Sponsoring Organisations of the Treadway Commission (COSO – 1992) reported various general areas for FSF schemes to include improper revenue recognition, overstatement of assets (other than accounts receivable related to revenue fraud), understatement of expenses/liabilities, misappropriation of assets and inappropriate disclosures. The ACFE’s Report (2012) indicated that FSFs causes the greatest loss to the corporate world while about half of all FSFs involve overstating revenues/assets. Other FSF schemes reported by COSO are improper accounting treatment, recording an asset at market value or some other incorrect value rather than cost, failing to charge proper depreciation or amortization against income, capitalising an asset when it should be expensed, improperly recording transfers of goods from related companies as sales, not recording liabilities to keep them off the balance sheet and omitting contingent liabilities (e.g., pending product liability lawsuits, pending government fines, and so on) from the financial statements.

According to Vanasco, (1998: 60), "*fraudulent financial statements are of great concern not only to the corporate world, but also to the accounting profession. Every year the public has witnessed spectacular business failures reported by the media. .... Events such as unreported revenues, manipulation of losses, inflated sales, fraudulent write-offs of uncollectible accounts, unusual related-party transactions, misappropriation of assets and many other irregularities have spearheaded several court rulings and shaped the auditing standards.*"

Based on some observed trends, Hopwood et al. (2008) outlined the general features of FSF as follows:

- The majority of fraud involves overstating revenues by recording them fictitiously or prematurely.
- FSF is much more likely to occur in companies with decreased earnings, earnings problems, or a downward trend in earnings.
- In a large majority of cases, either the CFO or CEO is involved in the fraud.
- In many cases, the board of directors has no audit committee or one that seldom meets, or none of the audit committee members has the required skills to perform as intended.
- The members of the board are frequently dominated by insiders (even related to managers) or by those with financial ties to the company.
- Auditor changes occurred about one-fourth of the time in and around the time of the fraud.

According to Higson (2003: 93), "*although the Joint-Stock Companies Acts remained silent on the subject of fraud, the Punishment of Frauds Act 1857 strengthened the law against fraud, making it an offence for a director or officer of a company to alter falsely a company's accounting records in order to defraud a creditor or a shareholder*." In furtherance to Higson's comment, due to the magnitude of the incidence of financial statements fraud which, more than ever before in the history of modern business, is leading to court cases requiring auditors/ independent accountants as expert witnesses, many auditors and audit firms are now diversifying into a fast developing area of accounting, forensic accounting –

"the application of investigative and analytical skills for the purpose of resolving financial issues in a manner that meets standards required by courts of law" (Hopwood et al., 2012: 3).

Internal Control Systems: The Nerve Centre of Auditing Role in Managing Corporate Fraud

According to the ACFE's Report (2012), 18.8% of fraud detection in the US was through the activities of auditors and this figure underscores the significance of auditing (as underpinned by effective internal controls) in fraud detection and management. In the words of Spira and Page (2003: 646), "*risk in a financial context is generally understood to be the potential for financial loss consequent on fraud and incompetence. Although it is widely recognized that such risk can never be entirely eliminated, it is generally believed that a system of internal control will act as a deterrent to fraud and a protection against incompetence*".

By definition, internal control is *"the process designed and effected by those charged with governance, management and other personnel to provide reasonable assurance about the achievement of the entity's objectives with regard to the reliability of financial reporting, effectiveness and efficiency of operations and compliance with applicable laws and regulations. It follows that internal control is designed and implemented to address identified business risks that threaten the achievement of any of these objectives."* (ISA 315, Paragraph 42).

The internal audit function, on behalf of the management oversees the operation of an organisation's internal control system. An internal control system comprises all policies and procedures adopted by the management of an entity to assist in their objective of achieving an orderly and efficient conduct of the business. This could be in the form of:

- adherence to internal policies
- safeguarding of assets
- prevention and detection of fraud and error
- accuracy and completeness of accounting records
- timely preparation of reliable financial information

According to the COSO, "*internal control is the process, effected by an entity's board of directors, management and other personnel , designed to provide reasonable assurance regarding the achievement of objectives in the following categories:*

- *Effectiveness and efficiency of operations*
- *Reliability of financial reporting*
- *Compliance with laws and regulations*"

The three main types of controls with which corporate frauds can be managed are preventive controls (authorisation controls, segregation of duties, organisational controls, supervisory controls, personnel controls, physical controls, arithmetic and accounting controls and management controls), detective controls (reconciliations, supervision, internal checks etc) and corrective controls (follow up procedures and management actions). The emphasis is always on the preventive controls and, to a lesser extent, corrective controls.

According to Pickett (2005: 165), 74% of reported government fraud cases were caused by either the absence of proper control or failure to observe control procedures. This underscores the significance of internal controls in preventing frauds within an organisation.

ISA 315 (understanding the entity and its environment and assessing the risks of material misstatement) identifies five elements of internal controls. These are:

- The control environment (the overall attitude, awareness and actions of management regarding ICs and their importance)
- The entity's risk assessment (emphasises identifying business risks, estimating their significance, assessing the likelihood of their occurrence and deciding upon actions to manage them)
- The information system (the procedures within both IT and manual systems by which the transactions are initiated, recorded, processed and reported)
- Control activities (policies and procedures other than the control environment which are used to achieve the entity's specific objectives)
- Monitoring of controls (how internal controls are monitored and corrective actions are initiated)

Nowadays, majority of corporate governance codes require an objective and adequately resourced internal audit function capable of providing the board with assurance regarding the effectiveness of the system of internal control. In addition, it is also the responsibility of management to establish and oversee internal control systems capable of preventing and detecting corporate fraud. The internal audit function is considered as part of such control systems and the function is, in turn, required to test and monitor the effectiveness of other control systems. Its key roles include assessments of risks, controls and security and privacy compliance and its outputs is used by management for the purpose of decision making and control. Furthermore, as part of their annual audit plan, the internal audit function is required to consider management's assessment of fraud risk as this will guide its adopted audit approaches and procedures. Besides, one of the yardsticks with which to measure an organisation's devotion to effective internal control systems is the value it places on the internal audit function.

For the internal audit function to be useful to management in their fraud prevention efforts, it should be supported and adequately resourced by top management and should, as much as possible, be objective and independent. The function should also determine if:

- The organisational environment fosters control consciousness
- Realistic organizational goals and objectives are set
- Written corporate policies exist that describe prohibited activities and the action required whenever violations are discovered
- Appropriate authorisation policies for transactions are established and maintained
- Policies, practices, procedures, reports and other mechanisms are developed to monitor activities and safeguard assets, particularly in high-risk areas
- Communication channels provide management with adequate and reliable information
- Recommendations need be made to enhance or enhance cost-effective controls to help deter fraud

In addition, the internal audit function should place a high degree of attention to the audit trail process in order to enhance its ability to detect corporate fraud. The audit trail is the most important element in detecting fraud as it includes processes such as chain of custody, authorisations and approvals. It is the responsibility of the internal audit function to help management ensure that the audit trail is generated. Similarly, in order to help prevent and curb the incidence of corporate fraud, the internal audit function can support management to establish and operate physical security and monitoring processes, fraud reporting hotlines, training and education for staff members.

Another important aspect of audit that relate to the internal control system is tests of control. Both external and internal audits carry out audit tests as a way of establishing the situation of an organisation's internal control system. The test comprises of audit procedures aimed at assessing the effectiveness of the design and implementation of internal controls. It examines an organisation's internal mechanisms, controls and processes to determine their adequacy and effectiveness and offer appropriate suggestions on the way forward.

Depending on the circumstances of a particular organisation, the following are the types of tests that may be carried out by auditors:

- Walkthrough test – This is used to ascertain how the system's objectives are being achieved
- Compliance test – This is adopted to assess whether or not control mechanisms are being applied
- Substantive test – This is carried out to test whether specific applicable control objectives are being achieved across the key areas of the entity's policies and operations
- Dual purpose test – This approach combines both compliance and substantive testing on the same piece of evidence

Whatever type of audit tests being carried out by the auditor, some of the techniques that can be adopted include:

- Re-performance of the entity's applications of the control by the auditors

- Observation of the application of specific controls within the organisation
- Inspection of document, report, and electronic files
- Reconciliation of records and accounts
- Interviews of appropriate management, supervisor, and staff personnel
- Confirmation from independent external entities such as customers, vendors and creditors

On their part, external auditors will be interested in the internal control systems of their clients because its existence and level of effectiveness will determine the extent of substantive testing external auditors will be required to carry out in their audit work. Corporate legislation such as the UK's Companies' Act (2006) require that external auditors express an opinion on whether or not proper accounting records have been kept. Similarly, during the statutory audit, the external auditor should ascertain whether or not management has taken reasonable steps to control fraud. If management has not, the matter may be reported in the management letter. Also, auditing standards such as SAS300 require the external auditors to obtain an understanding of the control environment sufficient to determine their audit approach.

The internal controls system remains the pivot upon which the wheel of the audit trinity rotates. It is the common denominator between the internal audit function, the external audit, the audit committee and the management. While the management is responsible for setting up an internal control system and an internal audit function for the purpose of fraud prevention among others, the internal audit function is charged with the responsibility of ensuring the effectiveness of the internal control systems. The external auditor is statutorily required to ascertain the presence and of expected control systems and evaluate the effectiveness of these controls with a view to (1) drawing conclusions on the suitability of these controls as bases for preparing the organisation's financial statements, (2) reporting on the controls to the audit committee and (3) making recommendations on improving the internal control systems. The audit committee's role is very central here as it is responsible for reviewing internal and external auditors' reports on internal controls, risk and environmental management systems and management's responses to these. It also reviews unusual transactions that are of

economic significance and supervises regulatory compliance, ethics, and whistleblower hotlines within the context of the organisation. Added to these, it is the audit committee's duty to oversee the activities of both the internal and the external audit functions to ensure their effectiveness. This role of the audit committee entails the following:

- Approves the appointment, retention, remuneration and removal of external auditors and the Chief Internal Auditor
- Reviewing the scope of internal and external audit works
- Co-ordinates the works of internal and external auditors and intervenes in cases of misunderstanding between the two sets of auditors
- Monitors the objectivity and the independence of internal and external auditors

Furthermore, the audit committee relates with the management in a way that will ensure good corporate governance and accountability part of which is the prevention and detection of corporate fraud. The committee does this through the following:

- Reviewing accounting policies and any changes in respect to these
- Reviewing applicable corporate code of conduct and monitoring management's compliance with these
- Monitoring compliance with legal and regulatory requirements
- Reviewing interim financial and non-financial information and press releases before they are released (Porter, 2009: 173)

Fraud and Internal Control in IT Environments

The current level of sophistication in business information systems and the continuous trend of huge corporate investment in information and communication technology have taken corporate fraud to another level. Frauds emanating from this trend in technology adoption include electronic fund transfer fraud, hacking, credit card fraud, accounting fraud, money laundering, investment fraud, tele-marketing fraud and identity theft, illegal database access, intellectual property infringement, distorted versions of website, hacking (Newman and

Clark, 2003: 54; Pickett, 2005:166). These growing corporate fraud schemes are carried out through various techniques such as input manipulation, direct file or programme alteration, data theft, abuse of privileges and unauthorised access (Hopwood et al., 2008: 306).

Inadequate controls within a computerised environment can portend economic and social dangers for an organisation. Corporate frauds constitute one of such dangers. The recently case of Kweku Adoboli, a rogue trader at Swiss bank UBS' Global Synthetic Equities trading team in London is a good example. In this scandal, the bank claimed to have lost £1.4 billion as a result of unauthorized trading performed by Adoboli (Blacker, 2012). A similar case was that of Jerome Kerviel, a junior futures trader in Societe Generale (a leading French bank) in which the bank lost an unprecedented £3.9 billion (Samuel, 2012). Yet, another example was that of the "Natwest Three" (Giles Darby, David Bermingham and Gary Mulgrew) convicted in February 2008 for wire fraud against their former employer Greenwich NatWest, at the time a division of National Westminster Bank (Clark, 2010).

However, an effective internal control system should be able to achieve the following within an IT environment:

- Efficiency of IT operations in terms of producing the best through minimal resources.
- Effectiveness of operations with regards to ensuring the IT objectives are achieved.
- Reliability of IT-based information which relates producing reliable information in terms of accuracy and completeness.
- Compliance with applicable laws and regulations specific to the organisation's political, industrial and legal environments.

In addition to the foregoing, the internal audit function should evaluate risk exposures relating to the organisation's governance, operations and information systems. Also, auditing in a computer environment will require two special forms of controls, application controls and general controls. Application controls cover the transactions and master files which are specific to an individual application. These include completeness, accuracy and authorisation of input as well as controls over processing, output and master files. On the other hand, general controls cover the general environment within which application controls operate. These are controls over systems development, controls to prevent/detect errors during

program execution, controls to prevent/detect changes to data files and controls to ensure continuity of operations.

The Role of Continuous Online Auditing in Managing Corporate Fraud

Continuous Online Auditing (COA) is "*a comprehensive electronic process that enables auditors to provide some degree of assurance on continuous information simultaneously with, or very shortly after, the disclosure of the information*" (Omoteso et al., 2008). As online business transactions continue to be on the increase, efforts are mounting on the technological feasibility and the financial and economic viability of COA (Alles et al., 2002; Vasarhelyi, 2002; Pathak et al., 2005). COA's benefits to both internal and external audits include quick discovery and investigation of errors and fraud, reduction of post year end intensive work level, time saving, adequacy, sufficiency and reliability of audit evidence, timely feedback to clients/management, assurance of data accuracy, instant capture of transactions and control breaches and easier review (Omoteso et al., 2008).

Instructively, COA could serve as a barrier to the occurrence of corporate frauds with the use of sophisticated ICT tools and techniques. These can be greatly enhanced through the design and use of appropriate artificial intelligence to function as *Continuous Intelligent Online Validation* capable of enhancing both the detective orientation (ex-post) and the preventive orientation (ex-ante) of COA (Helms, 2002; Omoteso et al., 2003). Furthermore, COA is capable of generating high powered instantaneous analysis of raw data which can make it possible to identify problems early and communicating the uncovered problems (e.g. internal controls deficiency) to the management for prompt corrective action.

Higson (2002) suggested that it would be more appropriate for COA to be carried out by internal auditors because of its nature and logistics. Along the lines of Higson's view, Voarino and Vasarhelyi (2002) assessed a bank's internal continuous assurance process meant to provide directors and stakeholders with robust assurance of the dependability of financial and operating information through a set of corresponding activities such as online internal risk monitoring. This, according to Voarino and Vasarhelyi, would be able to meet

the challenges of the rapidly growing banking environment, regulatory authorities' requirements and the structure of banking corporations.

In addition to COA, Omoteso (2013) concluded that "*the pattern observed thus far in the literature suggests that neural networks, DSS [decision support systems] models and ES [expert systems] capabilities will merge as veritable IT tools for auditors as this will combine their advantages to the greater benefit of all parties*".

Conclusion

Based on the tripartite audit function involving internal auditors as the internal corporate watchdog, external auditors as (he society's corporate watchdog and audit committees as the internal and society's corporate watchdog (through their oversight roles on both internal and external auditors), this chapter explained the nature, types and possible causes of corporate fraud within the context of business risk with a view to establishing how the three audit types can help in managing such frauds. The chapter also discussed the centrality of an entity's internal control systems to the effectiveness of auditors' roles in managing corporate fraud.

As the trend in corporations' adoption of information and communications technology tools and techniques in their operations continues unabated and predicted to impact and transform modern business practices, a new set of windows for corporate fraud continues to open. This chapter therefore examined the different kinds of fraud capable of being perpetrated in an IT environment and how an entity's internal controls can be used to prevent and detect these growing fraud schemes. It also explored the usefulness of an emerging auditing system, continuous online auditing to auditors (particularly internal auditors) in corporate fraud prevention and detection.

Although the chapter has accentuated the significance of internal control systems in the management of corporate fraud, it is instructive to note that certain factors can militate against their establishment/effectiveness. One of such factors is the costs involved in setting up and monitoring internal controls (including the internal audit function). The more complex and computerised an entity is, the more it will have to spend on its internal controls. However, if the cost of such controls is perceived to outweigh their anticipated benefits (that is the value of corporate fraud to prevent), it is only logical those in charge of governance

may be reluctant to establish such controls. Secondly, internal controls are set up and monitored by humans and for humans. Also, however perfect and strong internal control systems are, they can be beaten by humans. This may be due to employees spotting and capitalising on human errors (at set up or monitoring stages of internal controls), collusion of staff (particularly management staff), an outright by-passing or overriding of controls by management and, worse-still, auditors' complicity. Therefore, the best way to manage corporate fraud is through preventive controls targeted at humans. These include offering staff competitive remuneration and packages, supportive working environments, avoiding setting unreasonable performance targets and positive control environments being championed by senior management and others in charge of governance within the corporation. These will reduce the incidence of corporate fraud from two angles. On the one hand, it will enhance employees' intrinsic and extrinsic motivation and, on the other hand, it will improve auditor independence to operate impartially, competently and honestly.

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