Fraud and Fraud Control in a Computerized Accounting System

Modesta Egiyi
Godfrey Okoye University

European Review in Accounting and Finance | *ISSN 2754-4176*
Published by DEQE Publications| *https://eraf.deqepub.org*
4 Rhindmuir Dr, Baillieston, Glasgow G69 6ND, UK
deqepub@gmail.com; enquiry@deqepub.org

RESEARCH ARTICLE

Fraud and Fraud Control in a Computerized Accounting System

Egiyi, Modesta Amaka Ph.D

Department of Accounting, Godfrey Okoye University, Enugu

***Corresponding Author:** Egiyi, Modesta Amaka| Department of Accounting, Godfrey Okoye University, Enugu*

ABSTRACT

The advent of computerized accounting which involves the use of modern-day facilities in the day-to-day accounting came with not just benefits but challenges. This is a study on the modern-day accounting and the various ways fraudulent activities is affecting accounting. This study seeks possible solution and control to fraud in a computerized accounting system. The motive behind fraud and the various forms of fraudulent activities is encompassed in this study. People involve in fraud for majorly personal or individual gains or for organizational gains. Knowing the extent of damage fraud causes to firms and individuals will further expose the need for an effective working control system. The perpetuators of fraudulent activity in firms and modern-day accounting are seeking smarter ways to go about their desires, thus, possible solutions to the management of accounting details were proffered to help curb the level of fraud which is fast tarnishing the standard and credibility of accounting

Keywords: Fraud; Computerized Accounting System; Fraud Control; Firms

1. Introduction

Concerns about fraud have been of practical significance for as long as written records have been kept, and indeed may be a significant reason for the development of writing and record-keeping (Ezzamel, 2012; Basu & Waymire, 2006). Much of the fraud literature starts with a recitation of infamous accounting (Clikeman, 2009) and corporate scandals and frauds (Punch, 1996), and these often excite public interest and concern. Concern with fraud and accounting crime affects the level of confidence the public puts in financial institutions and other corporations that are diverse as, the stock markets, auditors, bankers, corporate executives, and government (Sanders & Hamilton, 1997). Numerous political, social, and corporate scandals, corruption and fraud in government, and fraudulent practices in politics, financial institutions, corporations, NGOs, and religious institutions impact the legitimacy of such institutions. The bother about fraud also impacts how economic, political and social life is organized, and our attitudes and policies towards innovation, entrepreneurship, and compliance to rules and law (Snider, 2000). Computerized accounting systems (CAS), which involve the application of computers and related technologies, schemes, and methods in the accounting function and process, have emerged to help overcome the drawbacks of manual accounting systems (Akamanwam, 2020). In line with the increase in the adoption of computerized accounting systems by many organizations worldwide, there have been earlier research and discussion on the effectiveness and usage of the systems in recent times. Existing studies on the assessment or evaluation of computerized accounting systems have narrowed down their focus only on the qualitative characteristics of computerized accounting systems. Such qualitative characteristics of computerized accounting systems include integration, speed, accuracy, timeliness, information scope, and ease of use (Choe, 1998; Doll & Torkzadeh, 1998; Meiryani, Susanto, & Sudrajat, 2019). Qualitative characteristics are focused on more because they could be explained based on the fact that these characteristics are grounded on the perceived usefulness and advantages of accounting information systems. However, none of these qualitative

Citation: Egiyi, Modesta Amaka. Fraud and Fraud Control in a Computerized Accounting System. *European Review in Accounting and Finance, 5(4), 1-8.*
Accepted: *October 16, 2021; Published: October 31, 2021*

characteristics could comprehensively assess the quality or effectiveness of computerized accounting systems, as they only emphasize the importance and usefulness of the systems, which are but resultant effects of the system's functionalities and processes. A more effective and credible scheme that can be utilized in assessing the quality and effectiveness of a computerized accounting system would consider the features and operations which are inherent in the accounting systems than those that focus on the advantages and perceived usefulness of the systems. Fraud is a term that can be associated with many fields and organizations. Fraud has various definitions, an area that has been examined and discussed from many perspectives in connection to various practices in many contexts. However, that many of the terms, concepts, understandings and behaviors surrounding fraud have not been done justice to in the accounting and auditing literature. Literature has used a limited range of perspectives in discussing fraud in accounting, most of the sources are commonly based on studies on either the causes of fraud based on individual behavior and experience or the capital market effects of illegal acts. The accounting literature and findings on fraud focus on the individual and further assume that fraud is an objective phenomenon; that we all agree what is a fraud, that there is limited moral or ethical ambiguity about the nature and effects of fraud, and that such agreements somewhat vary across time and space. The goal of this study is to understand the term fraud, its application to accounting institutions and also seek possible control of fraudulent activities in accounting. This study intendeds also to expand the range of perspectives used to understand fraud and to examine behaviors and practices that are typically under-researched in accounting and possible control measures.

2. Fraud

The layman's understanding of fraud is an act of deception for undeserved and unlawful gain. In accounting, the definition of fraud is not far from the already stated definition. Fraud is also understood as the false representation of a factual matter, whether by words or by conduct, by false or misleading allegations, or by concealment of what should have been disclosed which deceives or intends to deceive another so the individual will act upon it to his legal injury. Fraud is dishonest action meant to result in profit by bringing material and financial damages. Fraud is characterized by any of the following;

I. Fraud is an illegal activity
II. Illegal benefits generated by or for institutional or personal interest
III. Intentions aimed at damaging the institution
IV. Fraud is a premeditated act
V. Bases on misleading information

Fraudulent activities are backed by many motives, but basically, this study will be looking at two major motives behind fraudulent activities

I. Fraud perpetrated for corporate benefits. This form of fraud is usually carried out for corporate interest. The perpetuators majorly get involved in fraud to get the business or firm doing better, hence increasing productivity at a minimal cost, thus, the firm grows without cost. Some of these types of fraud include; tax evasion, undervaluing the companies' assets by not properly registering the companies' assets, performing illegal or forbidden activities, and intentionally applying wrong accounting policies.
II. Perpetrated for corporate damage. These are illegal activities that cause harm to a firm. They are done majorly for an individual benefit, they include but are not limited to, embezzlement, registration of void or ghost data to distort the truth, illegal payments and receiving of bribes, tampering with legal or vital documents.

Fraud in accounting is any act carried out to achieve deception and unlawful financial benefits. Fraud in accounting majorly focuses on two areas.

First, it has focused on individual wrongdoing, its causes, characteristics, and detection (Albrecht et al 2011; Brody, et al, 2012; Hoffman & Zimbelman, 2009). Typically, this area has capitalized on psychology, examining the fraudster or criminal and focusing on detection and prevention, typically through audit procedures (Brazel, Jones, & Zimbelman, 2009).

The second dominant approach in accounting fraud study is to observe the capital market reactions to corporate frauds or other illegal behavior, typically framed through economic theories of efficient markets or agency conflicts (Feroz et al, 1991; Dechow, et al 1996). These two areas have yielded significant insight into individual causes for fraud, audit responses, and capital market impacts, but then, many other questions and perspectives raised are likely to provide timely new understandings and identify other horizons and dimensions of fraud.

3. Types of Fraudulent Activities in Computerized Accounting

The term accounting fraud is misleading from a perspective. A more generic term, disclosure violation, might be more appropriate for our purpose. Our original dataset contained desecrations that run the gamut from failure to file appropriate and required financial statements with the Securities and Exchange Commission, to internal fraud that shows lack of appropriate internal controls and deliberate misrepresentation of the financial state of a firm, business, or company. There are many specific types of fraud, and splitting to a fine level of distinction produces few observations to make the results meaningful.

1. The inflation of revenue and earnings, or the shifting of revenue and earnings: in this type of fraudulent activity, revenues are inflated. The inflation of the revenues can be accomplished by the recognition of sales revenue in a fiscal period for goods prepared for shipment in a specific period but was delayed and shipped in a later period.; and systematically deferring the recognition of substantial amounts of advertising and promotion expenses. This was allegedly accomplished by shifting sales revenue, recognizing a contingent order as a sale, and recognizing revenue on goods not yet shipped. The allegation of shifting revenue or income, or inflating revenue or income is a huge type of fraud facing the accounting system.
2. Lying and/or making false or misleading statements about the financial prospects of the firm.: this type of fraud involves the company releasing false details as the account details of the firm. This goes on to deceive the government and individuals. this is usually done with the motive of evading tax or paying lesser tax. The reason for lying about the financial statement of a firm cannot be justified but then, it involves accounting fraud. The allegation of inadequate internal controls constitutes another type of disclosure violation. Inadequate internal controls result in a firm or business making huge profits from the business but then, no management plans to state how the cash flows in and out of the business. If there existed adequate internal controls, then the firm will have not just cash management plans but also investment plans because the cash flows are accounted for and put to good use. Failure of proper accounting assists in covering up the many fraudulent activities that perpetuate due to the absence of effective internal controls.

4. External Forces that Influence Accounting Fraud

I. Inability to State Market Value of an Asset

Unarguably, the prevalence of fraud is prominently higher in markets where verification of the quality of transacted goods is costly and also difficult. In a discussion of fraud in The New Palgrave, fraud is discussed as prevalent and as persistent as the asymmetrical information necessary to support it. Fraud may occur whenever the cost of verification of the producer's claims the actual purchase of the good or the service is prohibitively high. In a nutshell, there exists an inverse relationship between detecting fraudulent behavior and the expected cost of fraud with the cost of verifying the quality of the product. Following this reasoning, the chances of detecting accounting fraud are likely to be inversely related to the costs of valuing a firm's assets. For example, outsiders presumably have more difficulty detecting accounting misconducts in firms with high research and development (R&D) expenditures or extensive intangible assets, than in firms with visible tangible assets that are more easily valued. Since the probability of detection varies directly with the expected cost of committing fraud, the chances of accounting fraud should be more in firms with assets whose market value is difficult to state.

II. Another External Force to be Examined is the Effect of Conscientious Independent Auditing.

The role of the independent auditor is to provide outside valid verification of the veracity of accounting numbers. Arguably, the major asset of auditors is their reputation for verifying the quality of accounting numbers produced by corporate managers. Watts & Zimmerman, (1986) describe the importance of an auditor's reputation. Reputation gives auditors incentives to be independent. The establishment of a track record and reputation for discovering and reporting contract breaches is costly, but once established, the reputation increases the demand for the auditor's services and fees. If found to have been less independent than expected, the auditor's reputation is damaged and the present value of the auditor's services is reduced. He bears the cost. Thus, the auditor's reputation (a valuable asset) serves as a collateral bond for independence. To the extent that the more reputable auditors are, the more likely detection of accounting fraud is. It can be argued that firms with such auditors are less likely to commit accounting fraud.

5. Internal Determinants of Accounting Fraud

Attention is given to an evaluation of the effects of the structure of internal monitoring and reward systems on the probability of a firm committing accounting fraud. This is a not-so-popular determinant of fraud, but this study researches the role of the board and internal control in fraud. The structure of firms governance has been suggested as a variable that affects the likelihood of committing accounting fraud. For example, much of the debate in the

1980s over corporate governance centered on the role of boards of directors in mitigating accounting fraud. Outside directors are argued to have stronger incentives than inside directors, this enables them to monitor the activities of managers, including the manager's production of accounting numbers. In the late 1970s and the early 1980s, there was a considerable increase in the ratio of outside to inside directors of publicly traded companies, perhaps due to this public policy controversy. In addition, the New York Stock Exchange (NYSE) adopted a listing standard in 1978 that requires NYSE-listed companies to have audit committees made up of directors who are independent of management. The purported role of the audit committee in mitigating fraud was summarized in 1977 by Harold Williams, then-Chairman of the SEC: It should be evident, but perhaps bears repeating, that integrity in reporting financial data is vital both to an efficient and effective securities market and to capital formation. One key to increasing public confidence in that data, long advocated by many segments of the financial community, including public accounting firms is, the direct involvement by boards of directors in the auditing process and the integrity of reported financial information. The vehicle, which the Securities and Exchange Commission, the New York Stock Exchange, and an increasing number of public corporations have turned to, has been the independent audit committee (Williams, 1977). Some legal scholars and regulators have applauded the proliferation of outside directors and audit committees, on the basis that they raise the probability of detecting, and hence increase the expected cost of accounting fraud. Alternatively, there are arguments that outside directors and audit committees are largely perfunctory, thus having little or no effect on corporate governance. An additional part of a firm's governance structure that is thought to affect the incentives of directors to monitor managers is whether or not the board is classified. Boards of directors are classified (sometimes referred to as staggered) if in any year only a subset of directors stands for election or re-election. Usually, with classified boards, one-third of the directors stand for election or re-election to a 3year term. Consequently, classified boards impede quick transfers of control, and are frequently viewed as anti-takeover devices. There are basic competing views on the effect of classified boards on accounting fraud.

Viewed as an anti-takeover device, classified boards may slow down the incentives of board members to monitor managers, which may increase the likelihood of accounting fraud. However, as Weston, Chung, and Hoag point out, (Weston et al,1990) "management's purported rationale in proposing a staggered board is to assure continuity and experience," this suggests that classified boards might mitigate accounting fraud. The final variable of interest is the extent to which a firm uses accounting-based incentives in management compensation plans. There is a common acknowledgment that accounting choices are governed in part by contractual considerations.'

6. Examining Fraud and Wrongdoing

Berger (2011) usefully distinguishes between macro, micro, and individual approaches to the discussion of corporate and government crime and fraud. The research identifies four broad aspects of fraud on which researchers have focused:

a. The decision to engage in fraud

b. The temporally evolving character of frauds,

c. The context in which frauds occur

d. The effects of fraud and wrongdoing.

In illustrating these aspects, the study points out both the major emphases in accounting research on fraud and what other traditions may have to offer in developing and enhancing the accounting literature. These different aspects are inevitably partial and overlapping but they are based on a review of the accounting literature on fraud. Throughout our discussion of these aspects of research on fraud, we limit them with a more constructivist tradition that focuses on the discourses and practices which shape the boundaries of what constitutes and can be defined as fraudulent, illegal, immoral, or corrupt. Decision-making, perhaps the prevalent view of fraud emphasizes that acts of fraud can be the outcome of decision processes. Typically, it assumes that actors weigh the costs and benefits of wrongdoing and choose to embark on fraud when they deduct that the benefits of involving in fraud outweigh the costs. The approach typically focuses on treating organizational or national fraud as the result of a dominant decision-maker (e.g. Board, CEO, or executive). Fraud can also be approached based on individual decision-making, or decision-making approaches focused on the choice to whistleblow on suspected frauds. Choices made to commit or contribute (or not) to fraud, or choices by auditors in identifying fraud, are rooted in decision-making theories.

7. Managing Fraud in Modern Day Accounting

Accounting and auditing have grown past the crude method of paper and pen, rulers, and calculators. 21st-century accounting is more digital than analog. These days, accounting software are performing multiple accounting needs, transactions and computations. All that is needed is a reliable candidate with experience and knowledge to give instructions to these systems. The development comes with peculiar challenges. With the advent of modern-day computerized accounting, also came smarter ways of fraudulent activities. Scammers, fraudsters, and even employees of a firm have contributed to making fraud in accounting a relevant and prevalent challenge. Accounting is a core and important part of a business, fraud is a direct attack on a firm, most times, these frauds are financial frauds that affect accounts. How do firms mitigate this challenge? Fraud control in modern-day accounting is of utmost relevance and importance. It cannot just be handled by hiring a reliable or trustworthy individual, there is a basic measure that should be put in place to ensure that fraud in accounting is controlled and brought to the barest minimum to boost confidence in credible accounting and auditing.

Some of the measures to fraud control include;

Ensuring Privacy:

Websites today share a lot of information; they do not only share information but also provide their users with great control and specificity over these sharing activities. Emails have remained largely unchanged in the last decade. Methods of exploiting email, however, have evolved significantly, also, protecting personal information in email environments has become more challenging. Numerous data breaches and computer intrusions have been disclosed by the nation's largest data brokers, retailers, educational institutions, government agencies, health care entities, financial institutions, and businesses. Data breaches that involve sensitive personal information may result and aid identity theft and financial crimes like credit card fraud, phone or utility fraud, mortgage fraud, employment-related fraud, government documents or benefits fraud, loan fraud, and healthcare fraud. Identity theft involves the misuse of any identifying information, which could include name, account number, password, or other information linked to an individual to violate of federal or state law. Identity theft is the most common complaint from consumers which accounts for over 35% of the total number of complaints. With continued media reports of data security breaches, concerns about new cases of identity theft are widespread.

To help curb the fraud of identity theft which adds up to many accounting frauds and challenges, these measures should be taken.

a. Accountants should ensure to read policy statements explaining the type of information gathered, used, and protected in secured places. Look for the ability to review and modify gathered information.
b. Do not enter information on name, address, and email information without reading the privacy policy and details.
c. Be Secretive with delicate information – This includes information such as the mother's maiden name, state security number, bank details, email password, date of birth, and other personal information that are particularly valuable. People with malicious intentions can create havoc with financial records once they learn the date of birth, mother's maiden name, and other basic personal information.
d. Securing of passwords- Never reveal passwords both personal and business passwords to others no matter the circumstances. Use strong different passwords for each of the online accounts. Strong passwords contain alphabets, numbers, different symbols, and cases.
e. Endeavor to shut down every program protected by password and all associated windows or shut down the computer before walking away. Avoid trusting people with passwords as these are keys to private or business accounts.
f. Avoid sharing information with any site that has no physical location or phone number – be on the lookout for concrete details; a specific address or a company number that is verified and working.
g. Opt-out when asked to Share Information with Third-Parties – If a website's privacy policy gives the option to allow information sharing, just say no. Sharing of information makes fraud easier.
h. Carefully chose email provider – Ensure to choose an email service provider that offers message encryption or has robust spam filters. The use of an email service provider that does not offer built-in encryption capabilities leaves emails vulnerable.
i. Do not Talk to Strangers – avoid giving personal information to strangers. Locations as, newsgroups, bulletin boards, and Chat rooms are not secure places to drop personal information because the audience or members are not known. Remain anonymous in such a group if one must participate.

j. Limit Physical Access by Others – Limit the access total strangers, cleaners, or office assistants have to office or personal records, systems, and every other delicate and important equipment.
k. Require Positive Identification – Secure Socket Layer (SSL) browsers and Secure Multipurpose Internet Mail Extensions (S/MIME) email programs ensure the receiver is not an imposter. They perform authentication by demanding a certificate issued to the site by a Certification Authority (CA) such as Equifax, GlobalSign, and VeriSign.
l. Use a Browser that Supports SET or SSL Encryption – Secure is a set of rules or protocols for encrypted transfer of credit, financial, and accounting information over the internet. Secure Socket Layer (SSL) is a protocol for secure sessions over the internet.
m. Use Tools from Trusted Sources – Leading programs are from credible companies. When new programs come along, check out the development company before using them.
n. Close Old Online Accounts – Unused online accounts are a liability. Fraudsters could use them to infiltrate the more important accounts and perpetuate fraud.
o. Shred Sensitive Documents – Shred old vital documents which are no more in use. These documents if left carelessly can be accessed by anyone and this will give access to fraudsters.
p. Exercise caution when Opening Emails – Be especially wary of emails sent from strange individuals or businesses. Avoid paying much attention to them or giving them feedback that requires personal information.
q. Mobile Privacy – Personal information is more likely to be compromised through device loss or theft. Take adequate measures, mobile devices sometimes store location and may share such information with third parties and outsiders.

Accountants should put in place credible means and methods of safe guiding accounting information. The use of permissioned blockchain is fast becoming acceptable and this assures the security of accounting information as well as credibility. With the introduction of permissioned blockchain, information of customers and individuals are safeguarded from hackers and scammers, this will curb fraud to a significant extent because access to information is limited as a result of the security put in place by a blockchain.

Aside from identity theft which is a means of fraud, there exist other types of accounting fraud associated with modern-day accounting. When these frauds have been identified, there are basic measures that should be put in place for the adequate control of fraud.

First, the organization's attitude towards fraud control should be known. The transaction and operations carried out in the firm should be known and analyzed. The previous fraudulent activities carried in the firm should be studied.

Secondly, the fraud patterns should be investigated and known. Individuals with experience on fraud control and examination who possess knowledge of fraud detection and investigation should be hired for the duty of fraud control in computerized accounting.

Thirdly, with the identification of fraud activities, the risks of such fraud to computerized accounting should be known. These risks may include; financial impact of the fraud to the company, risk of negative reputation on the firm, the criminal character of the fraud.

Finally, and importantly, possible ways of controlling accounting fraud should be put in place. To effectively achieve this, the firm should be aware of the elements which encourage fraud, such as, unauthorized transactions, lack of transparency, lack of concrete rules and procedures, evading of scheduled control, and failure in correcting the weakness of the internal control structure.

Conclusion

Fraud is a core challenge to every organization. The perpetrators of these fraudulent activities seek smarter ways to advance their motives and ambitions. This study sought out the different dimensions of fraud and especially fraud in computerized accounting. Fraud cannot be ignored nor curbed, but then with the right measures and individuals, accounting fraud can be controlled. A lasting solution may not be given to the control of accounting fraud, because fraudsters keep seeking ways to advance their motive, but then, with adequate paying attention to details amongst many other measures discussed, fraud control can be achieved in modern-day accounting.

References

Akamanwam, E. I. (2020). Computerized Accounting systems: Measuring Structural characteristics. *Research Journal of Finance and Accounting*, 38-54.

Albrecht, W. S., Albrecht, C., Albrecht, C. O., & Zimbleman, M. F. (2011). Fraud Examination. Mason, OH: South-Western.

Basu, S., & Waymire, G. (2006). Recordkeeping and Human Evolution. *Accounting Horizons*, 201-229.

Berger, R. (2011). White collar crime: The abuse of corporate and government power. Boulder, CO: Lynne Rienner Publishers.

Brazel, J., Jones, K., & Zimbelman, M. (2009). Using nonfinancial measures to assess fraud risk. *Journal of Accounting research*, 1135-1116.

Brody, R. G., Melendy, S. R., & Perri, F. S. (2012). Commentary from the American Accounting Association's 2011 annual meeting panel on emerging issues in fraud research. *Accounting Horizons*, 513-531.

Choe, J. (1998). The effect of user participation on the design of accounting information systems. Information & Management. 185-198.

Clikeman, P. M. (2009). Called to Account: Fourteen Financial frauds that shaped the American Accounting Profession. Routledge, New York.

Dechow, P., W. Ge, C.R. Larson, & Sloan, R. G. (1996). Predicting Material Accounting Misstatements. *Contemprorary Accounting Research*, 1-36.

Doll, W. J., & Torkzadeh, G. (1998). Developing a multidimensional measure of systems use in an organizational context. *Information and Management*, 171-185.

Ezzamel, M. (2012). Accounting and Order. London, Routledge.

Feroz E, Park K, & V, P. (1991). The financial and market effect of the SEC's accounting and auditing enforcement releases. *Journal of Accounting Research*, 42-107.

Hoffman, V., & Zimbelman, M. (2009). Do strategic reason and brainstorming help auditors change their standard audit procedures in response to fraud risk. *The Accounting Review*, 811-837.

Meiryani, M., Susanto, A., & Sudrajat, J. (2019). The effect of environmental complexity on the quality of accounting information systems: Integration flexibility and complexity dimensions. *ICETT 2019: Proceedings of the 2019 5th International Conference on Education and Training Technologies*, (pp. 115–119).

Punch, M. (1996). Dirty Business: Exploring Corporate Misconduct. Sage, London.

Samie, M. (2006). Business and Research Methodology. ICAN PACK.

Sanders, J., & Hamilton, V. L. (1997). Distributing responsibility for wrongdoing inside hierarchies: Public judgements in three socities. *Law and Social Inquiry*, 815-855.

Snider, L. (2000). The Sociology of corperate crime: An obituary: (Or whose knowledge claims have legs?) . *Theoretical Criminology*, 169-206.

Watts, R., & Zimmerman, J. (1986). Positive accounting theory. Engle wood Cliffs, New Jersey: Prentice hall.

Weston, J., Chung, K. S., & Hoag, S. (1990). Mergers, Restructuring and Corperate control. Englewood Cliffs, New Jersey: Prentice Hall.