

**IMPACT OF INTERNAL CONTROL OVER ACCOUNTING FRAUD IN PUBLIC  
ENTERPRISES IN ADDIS ABABA**

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**June, 2011  
Addis Ababa**

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in public enterprises in Addis Ababa**

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## Statement of Declaration

I, Tekalign Negash Kebede, have carried out independently a research work on ~~Impacts~~ of internal control over accounting fraud in public enterprises in Addis Ababa” in partial fulfillment of the requirement of the M.SC program in Accounting and Finance with the guidance and support of the research advisor.

This study is my own work that has not been submitted for any degree or diploma program in this or any other institution.

Tekalign Negash Kebede

Sign: \_\_\_\_\_

June, 2011

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### **Statement of Certification**

This is to certify that Tekalign Negash Kebede has carried out his research work on the topic entitled “~~h~~mpact of internal control over accounting fraud in public enterprises in Addis Ababa.” The work is original in nature and is suitable for submission for the reward of the M.Sc. Degree in Accounting and Finance.

Advisor: Laxmikantham (PhD)

Signature: \_\_\_\_\_

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## **List of Acronyms**

ACFE: Association of Certified Fraud Examiner  
AICPA: American Institute of Certified Public Accountant  
APB: Auditing Practices Board  
AS and G: Auditing Standard and Guidelines.  
ATT: Accounting Trends and Techniques  
CAE: Chief Audit Executives  
CBE: Commercial Bank of Ethiopia  
CCTV: Closed Circuit Television  
CEO: Chief Executive Officer  
CFO: Chief Financial Officer  
COSO: Committee of Sponsoring Organizations of the Treadway Commission  
CRSP: Center for Research in Security Prices  
ETC: Ethiopian Telecommunications Corporations  
GAAP: Generally Accepted Accounting Principles  
GOC: Government Owned Corporations  
IAF: Internal Audit Function  
IC: Internal control  
ICQ: Internal Control Questionnaire  
IIA: Institute of Internal Auditors  
NAARS: National Automated Accounting Research System  
PCAOB: Public Company Accounting Oversight Board  
PWC: PriceWaterCooper  
SAS: Statement of Auditing Standards  
SAS: Statement on Auditing Standards  
SEC: Securities and Exchange Commission  
SOE: State Owned Enterprises  
SOX: Sarbanes Oxley Act  
SPSS: Statistical Packages for Social Science

## **Abstract**

*This study was conducted on impacts of internal control over accounting frauds in public enterprises in Addis Ababa. In general the paper uses sequential mixed methodology. Data are collected by using a self-administered survey which has both open ended and closed ended question. The questionnaire was given to both auditors and accountant who are found at different level. After feeding(inserting) the collected data in to SPSS for analyzing purpose; the researcher found that some of the company's internal controls are strong enough so that the possibility of accounting frauds which expected to happen is very low as compared to those surveyed public enterprises which are characterized by weak internal control. In general the reasons which plays a greater role in motivating and pushing peoples to commit accounting frauds includes personal finance al losses, living beyond once means, Lack of internal controls that prevent or detect fraud, ignorance and incapacity, and lack of an audit trial. The types of accounting frauds that is committed in the public enterprises are depend on the nature of the activity they undertakes and includes violating principles, manipulating of sales, manipulating of stocks(inventories), and manipulating revenues and expenses. Finally respondents agree that even if internal control is the best weapon to overcome accounting fraud related problems; it has to be supplemented by other issues like setting a code of conduct, training employees and consult about the ethical issues.*

Key words: Accounting frauds, Fraud triangle, Internal control

## Chapter One Introduction

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This thesis scrutinizes the impact of internal control over accounting frauds in public enterprises which are found in Addis Ababa city administration. Internal control is an accounting procedure or system designed to promote efficiency or assure the implementation of a policy or safeguard assets or avoid fraud and error. Internal Control is a major part of managing an organization. It comprises the plans, methods, and procedures used to meet missions, goals, and objectives and, in doing so, support performance based management (Arad and Navid, 2009).

The purpose of this chapter is to deliver background information on the thesis. The other parts of the chapters are organized as follows. The first section presents a summary of prior research conducted on the theme of the research which was considered as a background for the research. The second section sets out the statement of problems. The objectives of the research and the research questions are presented in the third and fourth section. The fifth and sixth section displays significance and scope and limitation of the research paper respectively. Finally, the structure of the thesis is presented in the sixth section.

### 1.1 Back ground of the study

Recent reported cases of multibillion-dollar fraudulent corporate accounting and reporting scandal have refueled public policy debates on Internal control (IC). It is an issue of considerable interest to policy makers involved in corporate governance issues. IC in essence is intertwined with and directly affected by the dynamics of corporate governance. IC is intended to assure that if it is properly designed and implemented it helps the companies can achieve their objectives and they become prevented from accounting frauds.

Prior studies on IC have supported the relevance of IC disclosures as a monitoring tool on IC for shareholders and have focused on two dimensions: examining the substance and variety of voluntary IC disclosures in annual reports; and determining the usefulness of IC disclosures to users of financial statements (El-Gazzar and Fornaro, 2003; O'Reilly-Allen and McMullen,

2002; Hermanson, 2000). For example, Deumes and Knechel (2005), Willis and Lightle (2000) and El-Gazzar and Fornaro (2003) analyzed the different types of assertions contained in IC disclosures. Wallace (1981) analyzed the content of IC disclosures of municipal government reports. Hermanson (2000) analyzed the demand for IC disclosures by surveying disparate user groups. He found that IC disclosures might serve to motivate both management and the audit committee to focus their attention on enhancing IC. Wallace and White (1996) found that senior management at companies with an internal audit function (IAF) focused primarily on aspects of financial controls (versus operational controls) and those at larger firms were more likely to publish IC disclosures. McMullen et al. (1996) found that although smaller firms had a higher incidence of financial reporting problems than larger firms, the incidence was lower when senior management at such companies published IC reports. IC disclosure is risky but the risk varies inversely with the level of IC attained (Root, 1998). For a company that has attained a high level of IC, such disclosure is an opportunity to showcase that quality.

Although larger businesses are more likely to experience economic crime, fraud may be more costly for small businesses (Thomas and Gibson, 2003; Price Waterhouse Coopers (PWC), 2003). The average small business fraud amounted to \$98,000 per occurrence compared to \$105,500 per incident for large companies (Association of Certified Fraud Examiners, 2004). On a per employee basis, losses from fraud can be as much as 100 times greater at small firms than large firms (Association of Certified Fraud Examiners, 2004; Wells, 2003). In addition, the damage inflicted by fraud goes beyond direct monetary loss. Collateral damage may include harm to external business relationships, employee morale, firm reputation, and branding (Price Waterhouse Coopers (PWC), 2003). In fact, some of the collateral effects of fraud, such as damage to firm reputation, can be long-term (PWC, 2003). Despite the increased incidence of fraud and enactment of new anti-fraud laws, many organizational anti-fraud efforts are not current and are somewhat superficial (Andersen, 2004). Hence, many entities are trying new and different steps to combat fraud (Price Waterhouse Coopers (PWC), 2003).

## 1.2 Statement of problem

The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. The Company's internal control over financial reporting includes those policies and procedures that: (I) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the Company's assets; (II) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that the Company's receipts and expenditures are being made only in accordance with authorizations of the Company's management and directors; and (III) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the Company's financial statements.

Management, including the Company's Chief Executive Officer (CEO) and Chief Financial Officer (CEO), does not expect that the company's internal controls will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of internal controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Also, any evaluation of the effectiveness of controls in future periods are subject to the risk that those internal controls may become inadequate because of changes in business conditions, or that the degree of compliance with the policies or procedures may deteriorate. Poor controls lead to losses, scandals, and failures and damage the reputation of organizations in whatever sector they are from (Picket, 2005).

However, despite the existence of certain possible inherent weaknesses that would exist in almost every system, howsoever perfect in design, the corrective action taken for rectification by

the management and its periodic assessment through the Systems Control Evaluation method adopted in Systems Based Audit<sup>1</sup> enables the fulfillment of the principal objectives of establishing and effectively operating internal control procedures.

Once the financial statement fraud has been committed it is difficult to stop, as most fraud techniques involve “borrowing” from one period and “loaning” to another period. With the passage of time, the amounts and numbers of people involved grow and the perpetrators can only continue to try hiding the fraud.

All the above discussed inherent limitations and problems about the internal control and the nature and type of fraud along with the gap in the literature with respect to impact of internal control over accounting frauds, in developing countries, Ethiopia in particular, call for undertaking such types of extensive research to tackle the issues.

### **1.3 Objectives of study**

The purpose of research is to discover answers to questions through the application of scientific procedures. The main aim of research is to find out the truth which is hidden and which has not been discovered as yet (Kothari, 1985). Before establishing the aims and objectives of the substantive research problem, a comprehensive review of existing literature pertaining to internal control and accounting frauds was undertaken. Therefore, after careful consideration of research problem, the following objectives of the study are determined.

The **main objective** of the research paper is to assess the impacts of strong and effective internal control in alleviating accounting frauds (i.e. fraudulent financial reporting and defalcations).

The **specific objective** of this thesis includes:

1. To examine the current internal accounting control of each organization ;

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<sup>1</sup> The systems-based approach: This approach requires auditors to assess the effectiveness of the internal controls of an entity, and then to direct substantive procedures primarily to those areas where it is considered that systems objectives will not be met. Reduced testing is carried out in those areas where it is considered systems objectives will be met.

2. To enumerate and discuss which accounting frauds are committed inside the organization;
3. To dig out what factors will contribute to individuals to commit fraud;
4. To investigate what ethical consideration should be followed by employee of the organization on top of the company internal control to overcome fraud related problems.

#### **1.4 Research questions:**

The study will try to answer the following questions:

- RQ 1: Do those public enterprises which are found in Addis Ababa have strong internal control?
- RQ 2: Do factors explained in Donald Cressey fraud triangle (i.e. Incentive, pressure and rationalization) motivate selected organization peoples to commit fraud?
- RQ 3: What ethical value do the organization employees must follow to combat accounting fraud?

#### **1.5 Significance of the study**

The researcher believes that the result of this research project will have the following significances:

- 1) This research paper could be used as an initiation (an eye opener) for those who are interested to conduct a detailed and comprehensive study regarding the impacts of internal control over accounting frauds in public enterprises.
- 2) Moreover, it will provide constructive feedback about the efficiency and effectiveness of the existing internal control practice of those public enterprises in A.A City administration.
- 3) What is more, the results of the study can prove to be of great importance to public organizations to gain a clearer insight onto how design, implement and finally evaluate internal control so that in turn alleviate the potential accounting frauds inside the organization and to the whole country by large.

#### **1.6 Scope and Limitation of the study**

Although internal control have a direct impact on reduction of management fraud which is committed by management at all levels and other types of fraud, this study is restricted to

exploring the internal control impacts on accounting fraud among selected public enterprises . Hence no attempt is made to explore the fender-bender of internal control in reducing management fraud and other types of frauds such as consumer fraud, mortgage fraud, and banking fraud.

The study, as already indicated, has basic purpose of investigating the impacts of internal control over accounting frauds in selected public enterprises. However, due to the basic fact that the subjects of the study only account for a limited proportion of the total public organization in the Addis Ababa , the generalizability of results that may be obtained from this study is limited.

In this regard a full picture of existing organizations internal control and their impact on overcoming accounting related fraud can be developed through a comprehensive study, which among other things, encompasses all public enterprises in the Addis Ababa as its subjects.

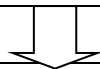
Nevertheless, it is beyond doubt that any research paper undertaken has no resource constraints. This study cannot be an exception to this fact. Moreover, it is hardly ever possible to get all relevant information from concerned respective public enterprises due to the organization bureaucratic response to the researcher, and individual refusal to cooperate to fill the questionnaire and to be interviewed. Besides, lack of research studies and availability of sufficient current literature in country context on the subject of impact of internal control over accounting frauds are some limiting constraints.

### **1.7 Organization of the paper**

This thesis is structured in accordance with my working investigation. The whole process is presented briefly as follow

<b>Chapter One</b>
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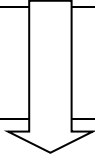
Presents background of the study, statement of problem, objectives of the study, significance of the study, scope and limitations of the study and organization of the paper.
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<b>Chapter Two</b>
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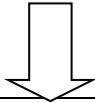
Provides about the related literature review.

- ✓ Section one shows about theoretical frame work and consists as a sub section like internal control, accounting frauds, methods of accounting frauds, fraud, triangle, ways to combat accounting frauds
- ✓ Section two depicts about the empirical evidences
- ✓ Section three tells about the knowledge gap



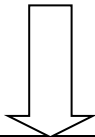
**Chapter Three**

Depicts a clear pictures of research methodology: philosophical justification, data collection methods, sampling techniques used, data analysis techniques employed



**Chapter Four**

Presents the data presentation and analysis and interpretation



**Chapter Five** Discuss the conclusion & recommendations made on the basis of the research findings.

## Chapter Two Related Literature Review

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Internal control system is a topical issue following global fraudulent financial reporting and accounting scandals in both developed and developing countries. A proactive preventive approach to the problem requires a critical evaluation of existing internal control structures in organizations to determine their capacity to ensure that the organization's activities are carried out in accordance with established goals, policies and procedures.

An organization needs internal controls to provide greater assurance that they will achieve their operating, financial reporting, and compliance objectives; in other words to help the organization succeed in its mission. Internal control helps ensure that the directions, policies, procedures, and practices designed and approved by management and the board are put in place and are functioning as desired. The more elaborate the organization, the more the need for internal control to counteract any loss of effectiveness sustained when adding more people and processes to transact business( COSO, 2006)

In light of the above, the purpose of this chapter is to review the literature in the area of impact of internal control over alleviating accounting frauds. This review of the literature establishes the framework for the study and highlights the apparent strengths and weaknesses of the previous studies, which, in turn, help in clearly identifying the gap in the literature.

The review has three sections. The first section presents a theoretical frame work which will have as a components like internal control, components of internal control, accounting fraud, fraud triangle, and ways to combat accounting frauds. This is followed by a review of the relevant empirical studies (evidences) on internal control and accounting fraud which will be seen in the second section. Finally, conclusions on the literature review and knowledge gaps are presented in the last section

## **2.1 Theoretical Framework**

Internal control means different things to different people. This causes confusion among business people, legislators, regulators and others. Resulting miscommunication and different expectations cause problems within an enterprise. Problems are compounded when the term, if not clearly defined, is written into law, regulation or rule.

### **2.1.1 Internal Control**

The formal definition of internal control, originally published by the accounting profession is in 1949 and repeated in subsequent publications, including Statements on Auditing Standards (SAS) No. 1 (paragraph 320.09), states ;

Internal control comprises the plan of organization and all of the coordinate methods and measures adopted within a business to safeguard its assets, check the accuracy and reliability of its accounting data, promote operational efficiency, and encourage adherence to prescribed managerial policies. (A) –System” of internal control extends beyond those matters which relate directly to the functions of the accounting and financial department.

Another definition for internal control is stated in the opening paragraph of Auditing Standards and Guidelines (AS and G) 7.2.4:

The whole system of control, financial and otherwise, established by the management in order to carry on the business of the enterprise in an orderly and efficient manner, ensure adherence to management policies, safeguard the assets and secure as far as possible the completeness and accuracy of the record.

Thus, two kinds of internal controls are included in the above broad definition: internal accounting and administrative (or operational) controls. Both are directed at reducing exposures to possible losses of an accounting or financial nature.

–Administrative control” as Statement on Auditing Standards No. 48 defined includes but is not limited to, the plan of organization and the procedures and records that are concerned with the

decision processes leading to management's authorization of transactions. Such authorization is a management function directly associated with the responsibility for achieving the objectives of the organization and is the starting point for establishing accounting control of transactions."

Internal accounting control is defined in SAS No. 1 (paragraph 320. 28) as:

The plan of organization and the procedures and records that are concerned with the safeguarding of assets and the reliability of financial records and consequently are designed to provide reasonable assurance that:

- a. Transactions are executed in accordance with management's general or specific authorization
- b. Transactions are recorded as necessary (1) to permit preparation of financial statements in conformity with generally accepted accounting principles or any other criteria applicable to such statements and (2) to maintain accountability for assets.
- c. Access to assets is permitted only in accordance with management authority.
- d. The record accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences

### **2.1.2 Components of internal control**

As defined in COSO Report, Internal Control consists of five interrelated components, namely monitoring, information & communication, control activities, risk assessment, and control environment, as illustrated and defined below. These are derived from the way management runs a business, and are integrated with the management process. Although the components apply to all entities, small and mid-size companies may implement them differently than large ones. Its controls may be less formal and less structured, yet a small company can still have effective internal control.



Fig 1. Components of internal controls

Source: COSO (2006)

### 2.1.2.1 Control Environment

The control environment sets the tone of an organization, influencing the control consciousness of its people. It is the foundation for all other components of internal control, providing discipline and structure. Control environment factors include the integrity, ethical values and competence of the entity's people; management's philosophy and operating style; the way management assigns authority and responsibility, and organizes and develops its people; and the attention and direction provided by the board of directors.

### 2.1.2.2 Risk Assessment

Every entity faces a variety of risks from external and internal sources that must be assessed. A precondition to risk assessment is establishment of objectives, linked at different levels and internally consistent. Risk assessment is the identification and analysis of relevant risks to achievement of the objectives, forming a basis for determining how the risks should be managed. Because economic, industry, regulatory and operating conditions will continue to change, mechanisms are needed to identify and deal with the special risks associated with change.

### **2.1.2.3 Control Activities**

Control activities are the policies and procedures that help ensure management directives are carried out. They help ensure that necessary actions are taken to address risks to achievement of the entity's objectives. Control activities occur throughout the organization, at all levels and in all functions. They include a range of activities as diverse as approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets and segregation of duties.

### **2.1.2.4 Information and Communication**

Pertinent information must be identified, captured and communicated in a form and time-frame that enable people to carry out their responsibilities. Information systems produce reports, containing operational, financial and compliance-related information, that make it possible to run and control the business. They deal not only with internally generated data, but also information about external events, activities and conditions necessary to informed business decision-making and external reporting. Effective communication also must occur in a broader sense, flowing down, across and up the organization. All personnel must receive a clear message from top management that control responsibilities must be taken seriously. They must understand their own role in the internal control system, as well as how individual activities relate to the work of others. They must have a means of communicating significant information upstream. There also needs to be effective communication with external parties, such as customers, suppliers, regulators and shareholders.

### **2.1.2.5 Monitoring**

Internal control systems need to be monitored-a process that assesses the quality of the system's performance over time. This is accomplished through ongoing monitoring activities, separate evaluations or a combination of the two. Ongoing monitoring occurs in the course of operations. It includes regular management and supervisory activities, and other actions personnel take in performing their duties. The scope and frequency of separate evaluations will depend primarily on an assessment of risks and the effectiveness of ongoing monitoring procedures. Internal control deficiencies should be reported upstream, with serious matters reported to top management and the board.

There is synergy and linkage among these components, forming an integrated system that reacts dynamically to changing conditions. The internal control system is intertwined with the entity's operating activities and exists for fundamental business reasons. Internal control is most effective when controls are built into the entity's infrastructure and are a part of the essence of the enterprise. "Built in" controls support quality and empowerment initiatives, avoid unnecessary costs and enable quick response to changing conditions.

There is a direct relationship between the three categories of objectives, which are what an entity strives to achieve, and components, which represent what is needed to achieve the objectives. All components are relevant to each objectives category. When looking at any one category--the effectiveness and efficiency of operations, for instance--all five components must be present and functioning effectively to conclude that internal control over operations is effective.

### **2.1.3. Accounting fraud**

No one knows how many business failures are actually caused by fraud, but undeniably lot of business, especially small firms<sup>2</sup>; go bankrupt each year due to fraud losses. Losses can occur in almost any areas, certainly not just in cash areas. Losses in cash actually represent the lowest level of Fraud. Accounts receivable, expenditures for services and inventory losses are each three times higher than those in cash (Spathis, 2002).

Accounting fraud involves an intentional action, leading to a misstatement in the financial statements. Webster's New Dictionary defines fraud as "intentional deception to cause a person to give up property or some lawful right". Federal Bureau of Investigation agent delineated fraud best as "the fraudulent conversion and obtaining of money or property by false pretenses: included are larcenies by bailed and bad checks, except forgeries and counterfeiting" (Farrell and Franco, 1999).

Most frauds involved an employee or manager of the victims' organization (Commercial Angles' Newsletter, 2001a, b, c). An analysis of the characteristics of perpetrators showed that the fraud influencing factors include age, gender, position, education background and existence of motive

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<sup>2</sup> According to Spathis small firms has 1-100 employees

for collusion. The growth of digital/computer technology procreates fraud and generates additional risks of treacherous and illicit activities in the future.

Fraud causes tremendous loss to the business world and creates morale problems in the workplace. When we are stripped of our money by fraudulent means, the consequences can be devastating. Fraud losses are serious problems to organizations that need to be managed, controlled and monitored. Technology, the criminal and law enforcement are continuously leapfrogging each other, as the race continues to build better tools, commit bigger crimes and develop more effective law enforcement. Fraud detection is an examination of the facts to identify the indicators of fraud. Reviewing and improving the internal control system is the primary defense against fraud.

#### **2.1.4 Methods of financial statement fraud**

Most techniques for manipulating profits can be grouped in to three broad categories; namely changing accounting methods, fiddling with managerial estimates of costs, and shifting the period when expenses and revenues are included in results (Worthy, 1984). Other false statement includes manipulating documents, altering test documents, and producing false work reports (Comer, 1998). For example, recording revenue on shipment after year end by backdating shipment document. Asset misappropriation schemes include the theft of company assets e.g. cash and inventory.

#### **2.1.5 Motivations for financial statement fraud**

Motivating factors cited for the involvement of management in fraudulent financial reporting include: compensation packages based on reported earnings. There is support in the literature for management compensation as a significant motivator of fraudulent financial reporting (e.g., Watts and Zimmerman, 1990, AICPA, 1987), although there have also been contrary findings (Dechow *et al*, 1996); desire to maintain or increase share prices; need to meet internal and external forecasts. When a firm is failing to achieve targets, there is incentive for management to falsify financial reports to meet them and protect share prices (Feroz *et al*, 1991, Dechow *et al*, 1996); desire to minimize tax liabilities (Spathis, 2002); need to avoid violations of debt covenants. Dechow *et al* (1996) found that firms committing financial statement fraud had higher

leverage than control firms. Spathis (2002) mentions the need to meet unrealistic commitments made to creditors as a motivation to commit fraud. The Tread way Report (AICPA, 1987) found that the desire to postpone dealing with financial problems (and thus violating debt covenants) was a frequent incentive for fraudulent financial reporting; and desire to raise external capital cheaply. Albrecht *et al* (2004) examine financial statement fraud from the perspective of four prevailing theories of management. They identify nine factors which together create the “perfect fraud storm”: a booming economy (which hid the fraud), moral decay, misplaced executive incentives, unachievable expectations of the market, pressure of large borrowings, US rules-based accounting, and opportunistic behavior of audit firms, greed on the part of a wide variety of groups of people and educator failures. These nine factors are analyzed by reference to the fraud triangle of pressure to commit fraud, opportunity to commit fraud, and inclination to rationalize fraud. They are also examined against agency and stewardship theories. Albrecht *et al.* conclude from their analysis that managers who identify with a stakeholder perspective rather than with an agency theory perspective are less likely to commit fraud.

#### **2.1.6. Beyond the Fraud Triangle**

To understand why people commit fraud, many professionals refer to the fraud triangle, which was developed in the mid-20th century. The significance of the fraud triangle in understanding motivation and its importance is most evident in Statement on Auditing Standards (SAS) 99, Consideration of Fraud in a Financial Statement Audit, which makes the concept central. Nevertheless, since the 1950s, professionals and academics have offered important insights that have gone beyond the fraud triangle. These extensions have enhanced professionals' ability to prevent, deter, detect, investigate, and remediate fraud.

Much of the current understanding of why perpetrators commit fraud is grounded in the fraud triangle. The concept of a fraud triangle dates back to the work of Edwin Sutherland, who coined the term white-collar crime, and Donald Cressey, who wrote *Other People's Money* (Patterson Smith, 1973). Cressey, a PhD student of Sutherland in the 1940s, concentrated his research on the circumstances that led fraudsters to initially violate ethical standards and engage in their first fraudulent act. Over the years, his research findings became known as the fraud triangle, whose

points represent the causal factors of perceived pressure (or non-shareable financial need), perceived opportunity, and rationalization

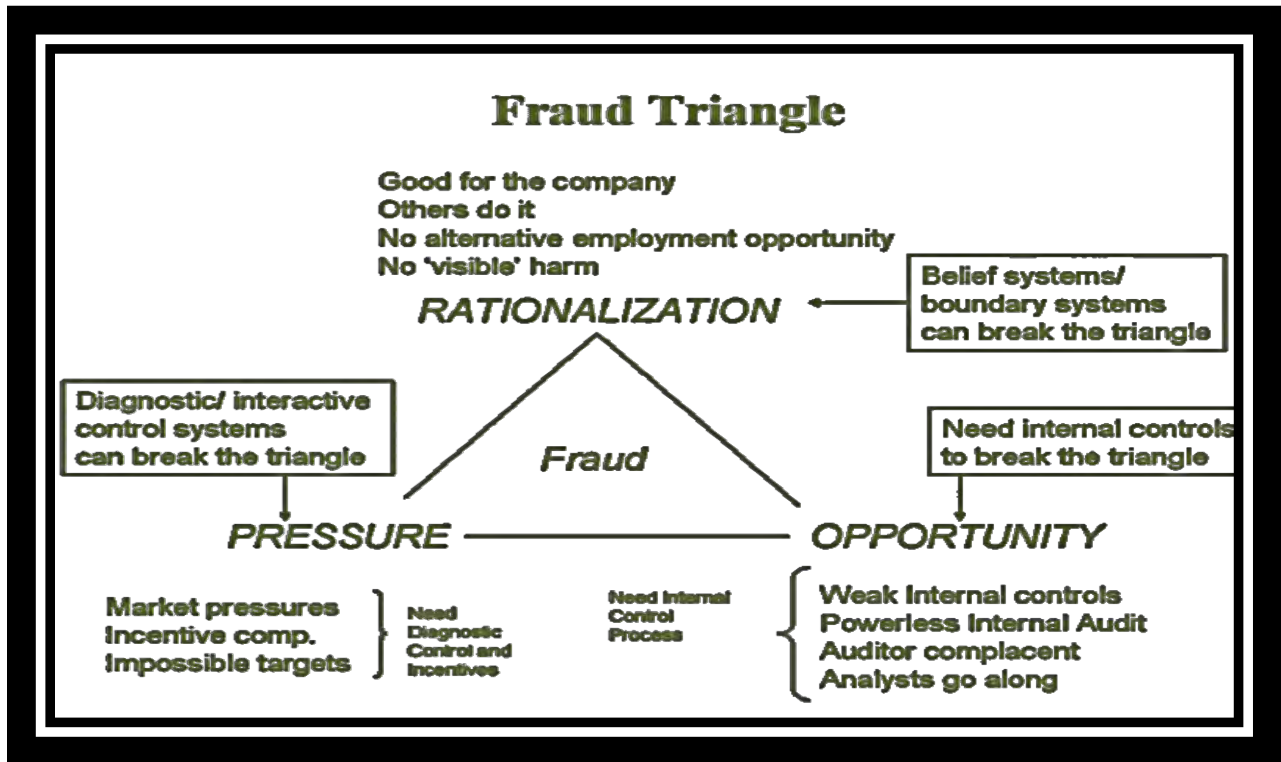


Fig 2. The Fraud Triangle

Source: Obsidian Publishing Co. (1997);

### 2.1.6.1 Fraud and Opportunity

Opportunity is the first requirement of the Fraud Triangle. Opportunity is an environment in which an individual feels that they can take part in criminal activity and not be identified as the perpetrator of the offense. Various conditions may exist within an organization or business which can give an individual that feeling of opportunity. If an organization has a lack of policy to control various activities which could allow an individual to take part in fraud and activity then the offender can become embolden to take part in a criminal action because of the lack of a formal written policy as a means of authority for enforcement (ACFE, 2007).

Organizations are very complex and are a system designed by humans to fill a defined purpose. In essence it is a social system and all social systems in order to operate effectively need a social fabric to hold the organization together. Parts of this social fabric in an organization are policies which provide guidelines to hold that social fabric together (Alinsky, 1984).

With the lack of policy in an organization in a business there is an inherent a lack of control. This can be lack of control of systems, programs and even people. This is seen by the individual not following the norms of society and in that organization as an opportunity to take part in fraud and criminal activity (ACFE, 2007).

One of the reasons of the lack of the control is the failure of the organization to conduct internal audits as a means of detecting and deterring fraud. Audits review the social structure of an organization to ensure that the structure provides patterns, forms and the proper methods to provide for the proper function of the organization's social fabric (Straus, 2002).

Authority and power in the social structure of an organization is critical to the next two areas of lack of control that lead to fraud. Authority in the social organization it the right or privilege to request or demand that individuals perform the duties for which they were hired and hold them accountable. Power is the ability to act as the authority figure in an organization (Straus, 2002).

Failure to Supervise is one contributing factor to internal fraud. If an employee is in an environment in which there is little or no supervision then this makes it less of a threat to take part in fraud against the organization because they feel they will not be detected (Liska and Messner, 1999). Power is a key social concept in organizational situations (Straus, 2002).

With authority in an organization comes responsibility (Straus, 2002). Failure to train employees in the proper methods and conduct with regard to job performance and improper and criminal acts within an organization can lead to fraud as well as using the failure to train as a defense by the perpetrator in civil matters in that they were not informed or provided training that such acts and action were improper or criminal (ACFE, 2007).

Failure to investigate errors and losses in an organization can be devastating as individuals taking part in improper or criminal acts of fraud will not be identified and no action will be taken against them. This only encourages them and others to continue in such fraud activities (ACFE, 2007).

Failure to take disciplinary action can have the same impact as failure to investigate. Many managers follow the theory of management and within that Y theory<sup>3</sup> goes to the extreme in which there is no control, supervision or disciplinary action because they want to be accepted by all of their staff. This type of management is also a sign of a weak supervisor and shows no leadership ability at all (Straus, 2002).

Inadequate security it can take many forms. This may be a lack of professional security officers. Little or ineffective use of physical security such as CCTV, access control, locks, intrusion detection systems and lighting can give a perpetrator the sense of privacy and they may then take part in fraud. There may also be a lack of security policies and procedures which can lead to fraud in the organization (ASIS International, 2007).

The last area related to fraud opportunity is that of trust. Trust of employees is critical to the success of an organization or business but often the one we trust the most can steal the most. The more trust one has, the more they can take in theft and fraud because of their position of trust in the organization (ACFE, 2007).

#### **2.1.6.2 Fraud and Motive**

There can be many motives for the commission of a crime such as fraud; one of those can be pressure. Most time this pressure is due to a need for money because of bills and other types of

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<sup>3</sup> Douglas McGregor in his book, "The Human Side of Enterprise" published in 1960 has examined theories on behavior of individuals at work, and he has formulated two models which he calls Theory X and Theory Y. Theory Y Assumptions includes; The expenditure of physical and mental effort in work is as natural as play or rest., Control and punishment are not the only ways to make people work, man will direct himself if he is committed to the aims of the organization, If a job is satisfying, then the result will be commitment to the organization, The average man learns, under proper conditions, not only to accept but to seek responsibility, Imagination, creativity, and ingenuity can be used to solve work problems by a large number of employees, Under the conditions of modern industrial life, the intellectual potentialities of the average man are only partially utilized

debt (ACFE, 2007). As Merton's anomie theory<sup>4</sup> indicated financial success or well-being is widespread in society today and can add to this pressure to have more money and wealth (Straus, 2002).

This need for money can come from various addictions such as drug use, alcohol abuse, gambling and sexual addictions as well. This is also connected to the individual's lifestyle which could revolve around wealth, the drug culture, the drinking and pub culture or various sexual lifestyles such as the homosexual community, utilization of prostitutes or involvement in the BDSM lifestyle<sup>5</sup> (Liska, & Messner, 1999). These addictions all cost money and can be a motive for fraud in the organization or business organization (ACFE, 2007).

Sexual activity, be it for the pleasure of just sex and dating or as part of romance can be demanding as it relates to personal finances to pay for dinners and depending on the situations, a place to stay. Often times some injudicious sexual activity can lead to blackmail in which large sums of money are demanded as not to reveal the relationship or encounter (ACFE, 2007).

Another motive is to fit in. There are many subcultures within an organization at all levels within the company (Straus, 2002). There may be employees in an organization who take part in fraud and other criminal activity. In order for an employee to fit into this subculture, they must take part in the theft and fraud in order to be accepted by that subgroup (ACFE, 2007).

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<sup>4</sup> Anomie commonly understood to be a feeling of normlessness or disconnect producing alienation and possibly leading to deviant behavior under a structural functionalist argument – is understood by Merton to apply to the chasm between cultural or societal goals or notions of success and the normative or institutionalized means of attaining said goal.

<sup>5</sup> BDSM is a continuum of erotic practice and expression involving the consensual use of restraint, intense sensory stimulation, and fantasy role-play. The compound acronym, BDSM, is derived from the terms bondage and discipline (B&D or B/D), dominance and submission (D&S or D/s), and sadism and masochism (S&M or S/M). BDSM includes a wide spectrum of activities, forms of interpersonal relationships, and distinct subcultures.

Ego is the final motive which can be considered with regard to internal theft and fraud in the organization. There are those individuals who will steal for the excitement of getting away with it (Liska and Messner, 1999).

Some will steal just to show that they can beat the system or to prove that they are more cunning and intelligent than the organization. Others will do it to beat the organization's loss prevention policies, procedures and countermeasures to fraud (ACFE, 2007).

### **2.1.6.3 Fraud and Rationalization**

Rationalization is a method and mental process by which an individual can come to an understanding in their mind and to justify any act or acts that they take part in. This could be an individual rationalizing how it is alright to eat ice cream when they are trying to lose weight. This same thinking is utilized by individuals who work in an organization and who take part in a onetime fraud event or a symmetric long-term use of fraud and espionage to steal from the organization (ACFE, 2007).

Rationalization can ease their guilt and provide them with the final requirement of the fraud triangle. After having opportunity and the motive elements of the fraud triangle met, many need to and do rationalize their actions as the last and final step in the fraud triangle. There are those who have no need to rationalize, they know what they are doing and for whatever the motive do not need to attempt to hide their criminal activity from their soul (ACFE, 2007).

There are many reasons to rationalize taking part in fraud or fraud against an organization. Some individuals rationalize that it is for a good cause. An example may be an employee making copies of a songbook which is used in their religion on the company photocopier machine. They may rationalize that it is not for them, but rather for a good cause: their religion and for God. This person may never steal or take part in espionage for them, but would do it for some other cause that they can project away from themselves (ASIS International, 2007).

Another rationalization is that everybody else does it. If an employee observes other employees taking part in fraud, especially if it was to include supervisors or management, and the employee

sees that there are no consequences for their actions. Based on this set of circumstances the employee may feel and rationalize that it is ok for them to do it as well (ACFE, 2007).

One rationalization that is utilized often by an employee is the concept that “I did not get a raise.” Oftentimes when an employee does not get the raise or a promotion they felt they should have received or any other benefit from the company or organization, they will rationalize that they deserved it. Once that is set in their mind they continue with the rationalization that the company is unfair and if they will not get what they deserve, they will take it. They do not think of it as fraud, but only that it is owed to them (Pontell, 2005).

Getting back at the boss is another rationalization especially if the boss is the owner of the organization. The employee may feel that they are just being treated unfairly or for some reason they do not like the boss or owner. The employee then rationalizes that it is alright to commit fraud in order to get even with the boss or owner of the organization for which they work (ACFE, 2007).

Another rationalization is that the company can afford it because they are making too much profit and money and that they will not miss what the dishonest employee plans on stealing through fraud (ACFE, 2007). This is the same rationale as the myth of Robin Hood stealing from the rich to give to the poor, which is also the belief system of rationalization of communists, socialists and liberals who want to take money from those who create jobs and those who work in jobs and give it to themselves as a government organization and to those who do nothing productive in society for their support and or votes (Savage, 2003).

Another rationalization could be that it is just a loan. Many individuals start out committing fraud because they have a temporary need for money. They begin to commit fraud with the sincere intentions of returning what was taken once they are in better financial standing. The individuals will even go as far as to keep accurate records of what they are stealing (or in their mind borrowing) so that they can pay the full amount back at some point in time when they can afford to (Pontell, 2005).

The problem that occurs is that the individual at some point in time realizes that they have taken so much through fraud that they cannot afford to pay it off because of their financial stature. At this point in time they may discontinue the fraud and never pay it off or if they feel that no one has noticed and they are still in need of funds, they will continue to steal without the rationalization that it is a loan and will accept it as theft. Some will switch from the rationalization that it is a loan to another rationalization if they do not want to admit to themselves that it is wrong or accept the responsibility of their actions (Pontell, 2005).

None of the rationalizations discussed can be used as an excuse for the fraud that is perpetrated on an organization with regard to criminal or civil action against the employee. These are only excuses the subject views as a reason for them not to be held accountable for their actions (Curran and Renzetti, 2001).

### **2.1.7 Methods to Combat Fraud**

Both fraudulent financial reporting and asset misappropriation have become major costs for many organizations. Numerous fraud prevention and detection techniques are now utilized to reduce the direct and indirect costs associated with all forms of fraud. These various techniques include but are not limited to: fraud policies, telephone hot lines, employee reference checks, fraud vulnerability reviews, vendor contract reviews and sanctions, analytical reviews (financial ratio analysis), password protection, firewalls, digital analysis and other forms of software technology, and discovery sampling (Carpenter and Mahoney, 2001; Thomas and Gibson, 2003). Organizations that have not been fraud victims tend to rely more on intangible prevention tools such as codes of conduct or fraud reporting policies while those that have suffered fraud have implemented more tangible measures such as whistle-blowing policies and fraud prevention and detection training (Price Waterhouse Coopers (PWC), 2003).

#### **2.1.7.1 Maintain a fraud policy**

Every organization should create and maintain a fraud policy for guiding employees. A corporate fraud policy should be separate and distinct from a corporate code of conduct or ethics policy. A model or sample fraud policy is available from the ACFE. Such a fraud policy should be clearly communicated to employees. Various avenues of communication include use in orientation of

new hires, employee training seminars, and annual performance evaluations. Written acknowledgment by each employee that the policy has been read and understood should be required.

#### **2.1.7.2 Establish a telephone hotline**

A rather novel fraud approach that is becoming more common is the use of anonymous telephone hotlines (Holtfreter, 2004). It is a very cost effective means for detecting occupational fraud and abuse. A hotline allows employees to provide confidential, inside information without the fear of reprisal that accompanies being a whistleblower (Pergola and Sprung, 2005).

Hotlines may be supported in-house or provided by a third party. An example of a third-party hotline is a subscription service offered by the ACFE. The annual subscription rate may be quite modest. The results of all calls are provided to the client within two or three days. A hotline is not only an effective detection tool but it also enhances deterrence. Potential perpetrators will likely have second thoughts when considering the risks of being caught.

#### **2.1.7.3 Employee reference checks**

Organizations should conduct employee reference checks prior to employment. An employee with a history of perpetration of fraud schemes may move from one organization to another. When employee references are not checked, a dishonest person may be hired. A dishonest employee can defraud an unsuspecting organization of thousands of dollars and move on to a new job before the fraud is discovered. Resumes should be scrutinized and information verified to determine that the information provided is legitimate. An organization should not rely on the telephone numbers listed on the resume for prior employers, as they may be false. Employer phone numbers should be obtained by the organization independently. Organizations should conduct a second reference check six months after an employee starts work. The reason for a dishonest employee's recent dismissal from a previous job may not have had time to become part of the employee's record during the initial search. This may be discovered by a second check (James L. et al, 2006).

#### **2.1.7.4 Fraud vulnerability reviews**

A fraud vulnerability review that investigates the organization's exposure to fraud should be performed. This includes an assessment of what assets are held and how they could be misappropriated. For those organizations involved in electronic commerce, a vulnerability review should also include an assessment of exposure to employee misappropriation or destruction of such "non-balance" sheet items as confidential customer data and financial information. The purpose of such a review is to "outsmart the crooks." A vulnerability review can help to direct an internal audit plan and, in particular, to highlight the most vulnerable assets. The review is considered a proactive step in fraud prevention and detection. Consideration of each class of asset and the evaluation of the exposure to loss helps the auditor or accountant to see what the thief sees. Steps then should be taken to eliminate, minimize, or at least control the exposures.

#### **2.1.7.5 Perform vendor contract reviews**

Review of company contracts and agreements can provide an indication of possible contract fraud, including kickbacks, bribery, or conflicts of interest by an organization's employees. Contract fraud can occur when a trade supplier fraudulently takes advantage of a contract to make illegal profits. Contract fraud may involve a conspiracy between entity personnel and a trade supplier or conspiracy among two or more vendors. Analyzing contract files for the same contractor routinely bidding last, bidding lowest, or obtaining the contract may detect this type of contract fraud. Awarded contracts may also be scrutinized for evidence of a supplier regularly being awarded contracts without indication of a legitimate reason for the constant receipt of contract awards. Such a review may reveal that bribes or kickbacks are the reason for the awards. A review of various public records may reveal whether an employee has a covert ownership interest in the contractor.

#### **2.1.7.6 Use analytical review**

Fraud can affect financial statement trends and ratios. Accounts that are manipulated to conceal a fraud may manifest unusual relationships with other accounts that are not manipulated. Also, erratic patterns in periodic account balances may occur because the fraudster may engage only

sporadically in fraudulent activity. Financial analysis conducted by an accountant or investigator may reveal existing relationships that are not expected or the absence of relationships that are expected to be present.

It may behoove the accountant or investigator to analyze several years of financial statement data using different techniques to obtain a clear picture of the financial impact of any fraud scheme. Various analytical review techniques which the accountant or investigator may employ include: trend (horizontal) analysis, ratio analysis (vertical analysis or common size statements), budgetary comparisons, comparisons with industry averages, and review of general ledger and journal entries. Unusual items should be pursued to determine if fraud could be the cause of an aberration.

#### **2.1.7.7 Password protection**

The growth of the internet and e-commerce has led to a rise in the number of dial-in ports to computer networks thus increasing the exposure to fraud. Accountants and investigators should assure that only legitimate users have access to the computer network and associated data. Although passwords are the oldest line of computer defense, they still constitute the most effective and efficient method of controlling access.

The difficulty with passwords is that there is an inverse relationship between making the password effective and usable. If password requirements are too complex, users will write the password down, placing it at risk (Gerard et al., 2004). Therefore, every organization needs to evaluate the tradeoffs. Passwords should be six to eight characters long with a mix of letters, numbers and special symbols. Users should be required to change their password often, for example, every 30-60 days. Additionally, users should have to cycle through 6-12 different passwords before being allowed to reuse a password (Gerard et al., 2004). Also, employees should not be allowed to display their passwords in any location where unauthorized individuals may see them. Lockout procedures should be implemented if a user fails to input a correct password after three attempts. Technology has advanced to create new forms of password protection using biological features of the user (i.e. biometrics) such as voiceprints, fingerprints,

retina patterns, and digital signatures. New forms of password protection are likely to become cost effective in the near future.

### **2.1.8 Linkage between Internal control and accounting frauds**

The establishment of a strong internal control environment where written policies and procedures are enforced, internal controls are appropriately implemented and employees are educated about fraud and its consequences is one of the best deterrents and methods of curtailing fraud. For internal controls to be effective, they must be constantly evaluated for effectiveness and changed as business processes are changed or altered.

The strength of IC structure played an important role in fraud detection and prevention. When internal control was strong, auditors performed more test of transactions, did not perform more test for fraud, yet detected fraud more frequently. In addition, managers committed fraud less frequently. A strong internal control structure promoted higher correlations (1) between test of transaction and test for fraud & (2) between fraud commission and test for fraud (Matsumura and Tucker, 1992).

## **2.2 Empirical Evidences**

This sub section presents the empirical evidence (i.e. those research that are done on the topic area) to support the undertaking of the research and helps the researcher to pin point the knowledge gap in the literatures.

Masson and Kenneth (1997) completed a research in accounting and finance which empirically investigates the causes and consequences of accounting fraud. Their study tests several hypotheses concerning why some firm, and not others, commit accounting frauds. They divide theses hypotheses broadly in to external and internal forces that affect the choice to commit fraud. The objectives of the study are accomplished through examination of a sample of 62 firms charged with disclosure violation by the Securities and Exchange Commission (SEC) during the period 1981-1987. Their study also examines whether directors of companies that commit accounting fraud are disciplined in the managerial labor market. In general, the researchers find significant effect from external forces and minimal effect from internal effects. Their paper finds

evidence suggesting that the cost of valuing assets influences the choice to commit accounting fraud. Furthermore, evidenced suggests that the immediate effects of the instigation of accounting fraud do increase stock prices. Corporate governance structure, auditor reputation and the use of accounting based executives' compensation schemes appear unimportant in affecting the decision to commit this type of frauds; they do however find that the concentration of ownership in a single individual mitigates the probability of accounting fraud. Finally, directors of firms committing accounting fraud appear to be punished in the managerial labor market.

McNamee (1999) introduced risk assessment as a tool to help to detect and deal with fraud in operations of organizations. He emphasized that managers had to take responsibilities to locate fraud. Risk assessment could also be used as a decision-making tool to assist manager's sort through a number of possibilities and single out those with the greatest payoff. Furthermore, managers could use this technique to identify and prioritize the most likely business processes where potential fraud could occur. McNamee further analyzed the three elements of risk assessment. First risk identification to determine the high-risk areas and its sources. Second risk measurement to determine the consequences of the risk and likelihood of its occurrence. Last, risk prioritization is to determine the appropriate resources to manage the risk. This paper only focused on one particular tool to detect fraud and did not suggest any alternative. It failed to give examples to illustrate the application of the tool to investigate fraud.

Farrell and Franco (1999) conducted a survey objectively to determine the variation in the opinion of those working for the former "Big Six" and other accounting firms. The survey was based on questionnaires mailed to approximately 1,700 accounting firms in New York, New Jersey and Connecticut areas, and approximately 300 questionnaires to the former "Big Six" accounting firms in the United States. The respondents were mainly managers and partners with only 10 per cent response rate. They concluded from the survey that all organizations were victimized by high product costs and low corporate profits. Normally everyone gets shock and disbelief when fraud was detected within an organization. They also stress the motives and specific characteristics of the offenders and the importance of prevention or detection strategies against business fraud. The auditor played an important role in prevention and detection of business fraud. The limitation of this paper is that the samples of the survey were only limited to

certain areas of the United States. Moreover, the response rate may be too low to represent the whole population. The generality of the empirical findings are therefore dubious.

Baker (1999) analyzed three matters with significant potential for misleading and fraudulent practices and the issue of fraud on the Internet. The three are:

1. Securities fraud on the Internet, especially activities that violated US security laws like stock price manipulation and non-existent investments;
2. Fraud in electronic commerce with regard to misused information and non-existent products; and
3. Fraud arising from the rapid growth of Internet companies that lacked traditional management and internal controls.

The author also gave suggestions on how these abuses may be combated. The paper did not discuss the risk and impact of Internet fraud to an organization and the economy as a whole. It did not highlight the role of management and auditors in the prevention and detection of Internet fraud.

Smith (1999) noted that now-a-days, digital technologies played an important role in the daily activities of the public. Benefits can be derived from digital technologies as the governments can deliver services electronically to everyone. Russell stressed how the developments of delivering services electronically by governments led to improper use and how the growing use of computer technologies by government agencies created additional risks of illegal and fraudulent conduct. This paper focused on two areas: the nature and the extent of the problem, and the preventive and control strategies. Several solutions to the problems were given, many of which also made use of computers. The author did not mention from the micro point of view about the other victims as fraud may happen anytime, anywhere and to any organizations. The paper also failed to give explanation on the cost and risky effects of a defrauding government towards the confidence of the people.

Haugen and Selin (1999) claimed that computer crime and fraud were more perilous to organizations today. This paper presented the statistics about the growth of fraud, and causes of fraud in the workplace. Furthermore, they elaborated on the common computer frauds,

techniques used to commit fraud, the computer-based controls, as well as on how business assets can be protected. They stated that none of the organizations in the world could be 100 per cent free of risk, and assessing an organization's risk to fraud was not easy. However, the risk could be mitigated by implementing a proper internal control system with good employment practices. The limitation of the paper is that the computer-based control that was suggested for prevention of fraud is costly and not user friendly, as it requires a specialist for its construction and maintenance. The author also failed to assess the effectiveness of the controls to an organization.

Colbert (2000) illustrated how the International Federation of Accountants and the American Institute of Certified Public Accountants provided guidance to auditors for detecting misstatements in the financial statements that were caused by errors and fraud. Misstatements may be the result of error or fraudulent activities. The author made the comparison of International Standard for error and fraud to the two US audit Standards and disclosed several similarities and few differences particularly on reassuring to auditors serving client offering cross-border securities. The major provisions in the standards provided guidance related to the definitions of error and fraud, the categories of risk, the process of assessing risk, and recommended audit procedures performed to locate and report errors, were alike. She further concluded that the remarkable consistency between the Standards implied that, comparable work was being performed no matter which guidance the auditor was utilizing. The limitation is that the paper only provides guidance from the point of view of the auditors; and did not provide a platform for fraud prevention procedures that could be carried out by management. Despite the differences noted in comparing the standards, no recommendation for improvement or amendment to standards was made to the less well development standards.

Apostolou (2000a) introduced fraud examinations as a non-recurring activity that was conducted when existence of a fraud in an organization was established. The main objective of the paper was to outline the differences between a fraud examination and a traditional audit. Fraud examination methodology was presented in the context of important legal considerations. It was a methodology of resolving fraud allegations from inception to disposition. Fraud examination involved obtaining evidence and taking statements, writing reports, and testifying to findings. The author stated that to conduct a fraud examination, the persons required skills to properly

detect and investigate an allegation of fraud and also knowledge of the legal elements and which law to apply. The limitation is that she failed to fulfill her objective to elaborate how the traditional audit is different from the fraud examinations. In addition, it focused only on fraud examination and did not describe other preventive measures.

Apostolou (2000b) discussed the procedures of conducting an Internet fraud investigation in a four-part series paper. In part one; she presented the terminology essential to developing expertise in fraud investigative techniques and an overview of civil and criminal law proceedings. Asset misappropriation, as introduced in part two was a serious problem that it can lead to material misstatement in the financial statements. Identifying the various asset misappropriation schemes was part of the fraud investigation. The third part covered the methods of making illegal payments in the disbursement process. Part four discussed the fraud investigation procedures. Fraud investigation consists of obtaining information to prove or disprove an allegation. The investigator should choose the procedures that provide maximum evidence for the minimum cost and risk. The fraud investigative techniques discussed are less applicable to the management as she had illustrated them from the viewpoint of the legal authority. In addition, the author failed to mention the fraud prevention procedures.

Apostolou (2000c) provided background information for enhanced understanding of occupational fraud and abuse. The responsibilities of auditors and fraud examiners were also highlighted. She explained the fundamentals of fraud, which consist of the typical schemes, legal elements of fraud, detection and prevention techniques. By referring to the statistical finding in “2002 Report to the Nation on Occupational Fraud and Abuse”, she noted that the fraud and abuse cost US organizations an estimated \$400 billion losses annually. The author further categorized fraud into fraudulent financial reporting (management fraud) and misappropriation of assets (employee fraud). Examples were quoted from the professional standards, and risk factors of management fraud were analyzed into:

1. Management’s characteristics and influence over its control environment;
2. Industry conditions; and
3. Operating characteristics and financial stability.

She failed to make comparisons of the functions and the responsibilities of auditors and fraud examiners. The paper did not mention the role of management to prevent and detect occupational fraud and abuse.

Riahi-Belkaoui and Picur (2000) stated that organizations today were more susceptible to fraud in the accounting environment than ever before. Fraud had caused massive losses to firms, individuals and society. They presented a general framework that was useful to identify conditions that were most conducive to fraud in the accounting environment. The framework was based on models and theories from criminology including conflict and consensus approaches, the ecological theory, cultural transmission theory and anomie theory. These theories offered alternative explanations for corporate fraud, white-collar crime, fraudulent financial reporting and audit failures. The authors failed to provide the steps on how to use the framework to categorize the fraud perpetrated in the accounting world. The paper also failed to mention the detective and preventive procedures that can be implemented.

Commercial Angles' Newsletter (2001a) introduced the various types of Computer accounting fraud. It classified groups that can perpetrate fraud: third parties, a company's employees, the company's management, suppliers and customers. In most cases, fraud was not reported because of the risk of embarrassment and reduction in the level of confidence in customers or shareholders. As a result, it was difficult to measure the losses to business caused by fraud. And of the reported frauds, a majority of the worst kind was usually committed by a company's own employees or management. Only a brief discussion took place on the ways fraud took place and the motives of the perpetrators. The newsletter did not mention the impacts of fraud on an organization and how fraud can be prevented.

Commercial Angles' Newsletter (2001b) examined the indicators to determine whether a fraud had taken or is taking place. There was no single test to show in every case that a fraud had been committed. Some of the more sophisticated frauds, such as short-term share price manipulation were incredibly difficult to unravel. Conversely, less sophisticated frauds frequently involved only an employee or a manager of the defrauded company. Sample questions for scanning of each method of perpetrating to the suspected fraud were distributed to the surveyed companies to

allow the companies to evolve a fraud detection plan with clear objectives. The paper stressed that effective fraud detection required management to be sufficiently knowledgeable about the mechanics of the business and at the same time, be constantly aware of the need to be vigilant against fraud. The limitation of the paper is that the analysis of response to the queries was not made. It failed to provide information on specific tools or techniques to detect computer fraud and abuse.

To Commercial Angles' Newsletter (2001c), the best way of preventing fraud was to understand why it happened. Fraudsters generally identify an opportunity for exploiting a weakness in the control procedures and then assess whether their potential rewards would outweigh the penalties should they be caught. In addition, the paper introduced the two-stage processes of fraud prevention. First, an organization must ensure that opportunities for fraud were minimized: fraud prevention. Second, organization should ensure that potential fraudsters believe they will be caught: fraud deterrence. Introduction and enforcement of new controls would reduce the opportunities for perpetrators. A regular control was most effective and normally required little management time or effort. It also emphasized the importance of having strong management and a healthy corporate culture to detect and consequently deter fraud. The limitation of this paper is that it did not specify the detailed control procedures for two-step processes of fraud prevention. It failed to explain the financial effects and risk of computer fraud if prevention and deterrence procedures were not in place.

Bowe and Jobome (2001) discussed the designation of a managerial framework to control the operational risk, and focus on unauthorized trading fraud. A sample of 37 cases was taken for examination from financial institutions in eight countries over the period 1984-1999. The sample results indicated that internal controls were the primary defense against severe fraud losses and showed that the regulatory penalties imposed on senior supervisory management, in addition to the fraudster, were crucial in ensuring efficient mitigation of fraud loss. Losses from unauthorized trading fraud can be identified with breakdown of controls and constraints designed to mitigate losses from operational risk. The limitation of the paper is that only one type of fraud was analyzed, as there may be other types of fraudulent activities in the financial services

industry. The survey also failed to identify the motives of fraud and other preventive measures to combat fraud.

Rusch (2001) discussed the rapid rising tide of Internet fraud in electronic commerce. Fraud grew in conjunction with the expansion of legitimate Internet use. The author quoted the report of International Chamber of Commerce's Commercial Crime Services Division that Internet fraud in 2000 was "rising dramatically", more than twice as much as in 1999. The emerging data suggested that the problem of Internet fraud was becoming global in scope and impact, as criminals could plan and execute fraudulent schemes from anywhere in the world and victims might be located anywhere in the world. The paper illustrated that the criminal statutes that apply to other types of white collar crime – conspiracy, mail and wire fraud, credit card fraud, securities fraud, money laundering, and identity theft – were equally applicable to various forms of Internet fraud. In addition, a variety of existing sentencing guidelines also enabled federal prosecutors to seek higher sentences in appropriate cases of Internet fraud. The limitation of the paper is that it did not provide the solutions to Internet fraud. The authors failed to discuss the Internet fraud breaches by insiders, as insider fraud is more serious.

Weili and Sarah (2005) conducted a qualitative research on the topic of disclosure of material weakness in internal control after the Sarbanes-Oxley Act. Their paper focuses on sample of 261 companies that disclosed at least one material weakness in internal control in their SEC filings after the effective date of the Sarbanes-Oxley Act of 2002. They find that poor internal control is usually related to an insufficient commitment of resources for accounting controls. Material weakness in internal control tend to be related to deficient revenue-recognition policies, lack of segregation of duties, deficiencies in the period-end reporting process and accounting policies and inappropriate account reconciliation. In their statistical analysis, they also find that disclosing a material weakness is positively associated with business complexity (e.g. multiple segment and foreign currency), negatively associated with firm size (e.g. market capitalization), and negatively associated with firm profitability (e.g. return on asset)

Samuel (2008) conducted research project for his partial fulfillment of his master's degree in accounting and finance on an internal audit reporting relationship in Ethiopian public enterprises.

The main intent of the research was to analyze the reporting line of internal audit and investigate its relationship with internal audit scope, independency, good governance and audit committee. He used a sample size of 12 organizations from those public enterprises which are operated in Addis Ababa. He found that the majority of Chief Audit Executives (CAE's) in the Ethiopian public enterprises sampled in his research directly to the board, audit committee or its equivalent, and administratively to the general manger and the organizations internal audit scope is more limited on the verification of financial transactions (financial audit), compliance audit, assessment of internal control, and fraud investigation. Finally he conclude that internal audit is one of the key corner stone of effective good corporate by providing assurance on the risk management, control and governance process within organization

### **2.3 Knowledge gap**

Internal control over financial reporting is defined as ~~a~~ process...to provide *reasonable assurance* regarding the *reliability* of financial reporting ...” (PCAOB 2004, emphasis added). By definition, good internal control is supposed to result in more *reliable* financial information. Internal controls aim to prevent and/or detect errors or fraud that could result in a misstatement of the financial statements and misappropriation of Assets. However, there is limited empirical evidence in the existing literature regarding the relation between the quality of internal control and the quality of accounting information. A major reason is lack of data on internal control; in general, it is difficult to directly observe or verify internal control (Kinney, 2000).

Even though so many prior scholarly researches are conducted on the various aspects of internal control to the knowledge of the researcher there is no any research which studies the impacts of IC on accounting frauds by making the researches case study Public enterprises. So as per the researcher level of understanding it is a crucial time to undertake a research on the topic to assess the impact of internal control in alleviating accounting frauds, to what extent do Ethiopian public enterprises are design and implement internal control so that they are in a best positions to overcome the problems of accounting fraud, and finally to explain in detail what factors can contribute (forces) the perpetrator to involve in committing accounting frauds.

## Chapter Three Methodology

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### 3.1 Methods Adopted

Research is a complex process, which constitutes –data collection, coding, all other processes of preparing and analyzing data, including the presentation of the results...” (Drucker-Godard, Ehlinger and Crenier, 2001). Therefore, at the beginning of research, once the research problem is identified, the choice for research methodology to direct this complex process in an orderly manner is a necessity.

According to one source on research procedure, –Research methodology can be conceived as a system of rules and procedures. Such rules and procedures are important in research for the purposes of reasoning i.e. a specific logic to acquire insights; inter-subjectivity i.e. reporting how the researcher has obtained the findings and communication i.e. reporting in manner to enable others to replicate or criticize...” (Ghauri, Gronhaug, Kristianslund, 1995, p. 24).

The foregoing chapter has indicated that the literature on internal control, accounting frauds and their linkage between internal control and accounting frauds, in those public enterprises which are found in Addis Ababa in particular, it has been shown that there is no comprehensive study in the assessment of impacts of internal control in alleviating accounting frauds. The literature review has also revealed that, although empirical evidence appears to be almost nonexistent, the strength of internal control in particular, may have an impact on accounting frauds.

The purpose of this chapter is to present the underlying principles of research methodology and the choice of the appropriate research methods for the thesis. The chapter is arranged as follows. The first section presents the philosophy of quantitative, qualitative, and mixed methods (along with discussion of the choice of the appropriate method for the current research) approaches. Then, the quantitative and qualitative aspects of the research method adopted in this study would be shown. Finally, items in the specific method of inquiry and sampling techniques are presented in this section.

### **3.1.1 Quantitative research approach**

Quantitative research is one in which the investigator primarily uses positivist claims for developing knowledge (Creswell 2003, p. 18). Merriam (1998, p. 9) also noted that quantitative research design is based on the philosophy of positivism, logic and empiricism. Quantitative research employs a review of the existing literature to deductively develop theories and hypotheses to be tested i.e., in this approach, the research problem is translated to specific variables and hypotheses. As the literature on research methodology shows, quantitative research approach tends to assume that there is a cause and effect relationship between known variables of interest. In line with this, quantitative research tests the theoretically established relationship between variables using sample data with the intention of statistically generalizing for the population under investigation.

A quantitative research approach employs strategies of inquiry such as experiments and surveys, and collects information using preset standardized instruments that can generate relevant statistical data. Quantitative research design uses statistical methods in describing patterns of behavior and generalizing findings from samples to populations of interest (Rudestam and Newton 2001, p. 27).

Well designed and implemented quantitative research has the merit of being able to make generalizations, for a broader population, based on findings from the sample. To enhance the generalization of findings, quantitative research methods follow, at least theoretically, standardized procedures in sample selection, instrument design, implementation and analysis. This standardization in turn increases the replicability of procedures and the reliability of findings and also can mitigate the impact of interviewer (if administered through direct interviews) and interviewee biases (Yesegat, 2009).

Notwithstanding the above advantage, quantitative research design has a number of limitations. The first limitation is that quantitative research is based on the assumption that research procedures, including instrument design, sample selection and implementation, can be standardized and would lead to reliable outcomes. In reality this may neither be easy nor true for several reasons. Firstly, the research problem may require exploration of new ideas, which may not be achieved by following structured procedures. Secondly, due to lack of information about

or access to the population and for convenience, the sample selected may not be representative of the population under study. This would introduce a bias, which may compromise the reliability of findings. Thirdly, bias may also be introduced in the preparation of questions and administration of experiments and surveys. For example, in the case of designing survey questions, the researcher may use wordings which would lead to predetermined outcomes. Similarly, in the case of experiments, bias may be introduced due to the experimenter's prior engagement with the participants, and experimenter's expression of the purposes and instructions of the experiment (Yesegat, 2009).

The second limitation of quantitative research approach is that it does not assess human behavior in its entirety and it reduces human behavior to predetermined variables. Further, this approach has been criticized for its attempt to study human or social phenomenon independently of its contextual setting. Such a focus of quantitative research on examination of human or social phenomenon separately from its contextual appearance would not enable one to make a comprehensive assessment of a research problem which involves social or human phenomenon.

Thirdly, quantitative research appears to lack flexibility in design which may be crucial when additional information revealed through data collection needs further exploration for knowledge. Pure quantitative research design appears also to lack interpretive and exploratory examination of a research problem.

### **3.1.2 Qualitative research approach**

Qualitative research approach is one in which the investigator often makes knowledge claims based primarily on the multiple meanings of individual experiences, socially and historically constructed meanings, participation in issues, collaboration or change oriented with an intent of developing a theory or pattern (Creswell 2003, p. 18). In contrast to quantitative research design, qualitative approach is rooted on the philosophy of phenomenology, symbolic interactionism and is based on naturalistic, grounded, constructivist, interpretive and participatory perspectives (Merriam 1998, p. 9; Creswell 2003, p. 18).

Qualitative research is not intended to test a predetermined theory or hypothesis; instead, it is exploratory in nature and through induction it builds theories or hypotheses. As a result, in

qualitative research approach there are no hypotheses, which would guide the study, to be deduced through examination of the existing theoretical and empirical studies. In showing the lack of an established theory and exploratory nature of the qualitative research approach, (McDonald and Daly 1992, p. 213 cited in Liamputtong and Ezzy 2005, p. 5) noted that this approach is particularly essential when the researchers have little knowledge about the area of investigation.

Qualitative research tries to assess experiences and events contextually and within their natural setting and attempts to analyze them holistically. This implies that qualitative research examines events or circumstances without much disruption in their natural environment and it focuses on understanding a phenomenon in its entirety instead of detaching a constituent and assessing it separately from its whole part. This shows that qualitative research is concerned with, among others, developing a comprehensive understanding of a phenomenon under investigation.

A qualitative research approach uses strategies of inquiry such as narratives, ethnographies, grounded theory studies, or case studies. It also uses data collection methods including observations, interviews, documentary and audiovisual materials studies and the findings are conveyed subjectively through descriptions using words rather than numbers. That is, in qualitative research the main emphasis is on description and inductive discovery of evolving theory that may arise after observation is carried out i.e., data is collected. It offers ‘thick’ descriptions and allows entry to subjective social constructions of people; it presents the information gathered verbally in a detailed and complete form, not in numbers or formulae (no statistical analysis) (Sarantakos 2005, p. 45).

Qualitative research design has its own strengths and weaknesses. The advantage of a qualitative research design is that it is flexible and emergent without being constrained by standardized procedures (Liamputtong and Ezzy 2005, p. 204). This feature of qualitative research enables the investigator to explore and understand phenomena entirely in their natural environment and discover emerging theories. Warr, 2004, p. 578 cited in Liamputtong and Ezzy 2005, pp. 204-205) also noted that qualitative research provides researchers with an opportunity to listen to people tell their life stories and the method can yield rich and complex data.

Notwithstanding the above advantage, qualitative research design has its own limitations. First, the lack of standardized rules in the research design and the emphasis on giving meanings and interpretations to events and things reduces the objectivity and replicability of the research process. This in turn compromises the reliability of findings. In this connection, quantitative researchers have argued that the interpretive nature of qualitative data makes it soft science lacking in reliability and validity (Baum 1995; Denzin and Lincoln 2000; Guba and Lincoln 1994 cited in Liamputtong and Ezzy 2005, p. 2). Moreover, as Sarantakos (2005, p. 46) argued, qualitative studies do not produce data that allow comparison; the methodological approach does not ensure objectivity, and hence the quality of the findings is questionable and the research structure and procedure do not ensure the validity and reliability of methods. Further, there is no way of assuring that the researcher fully and correctly captures the true meanings and interpretations of the respondents.

### **3.1.3 Mixed methods approach**

What we have understood from the above discussions is that, both quantitative and qualitative methods have limitations. The strongest side of a quantitative research design may be limitations for a qualitative design and vice versa. The limitations of these research approaches could be mitigated by adopting a combined strategy. In connection to this, Creswell (2003, p.15) noted that through a mixed methods approach, biases and weaknesses inherent in any single method could neutralize or cancel those of other methods. Greene et al. (1989, p. 256) also emphasized that all methods have inherent biases and limitations, so use of only one method to assess a given phenomenon will inevitably yield biased and limited results. Greene et al. (1989) continued to argue that when two or more methods that have offsetting biases are used to assess a given phenomenon, and the results of these methods converge to corroborate one another, then the validity of inquiry findings is enhanced

Mixed methods approach , which is believed to mitigate the biases of quantitative and qualitative approaches, is one in which a researcher tends to base knowledge claims on pragmatic grounds employing strategies of inquiry that involve collecting both quantitative and qualitative data either concurrently or sequentially to best understand research problems (Creswell 2003, pp. 18-20).

A mixed method study involves the collections or analysis of both quantitative and/or qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research.

The goal of mixed methods research is not to replace either of quantitative or qualitative approaches but rather to draw strengths and minimize the weaknesses of both in single research studies and across studies. If you visualize a continuum with qualitative research anchored at one pole and quantitative research anchored at the other, mixed methods research covers the large set of points in the middle area. If one prefers to think categorically, mixed methods research sits in a new third chair, with qualitative research sitting on the left side and quantitative research sitting on the right side.

Mixed methods research as the third research paradigm can also help bridge the schism between quantitative and qualitative research (Onwuegbuzie & Leech, 2004a). Methodological work on the mixed methods research paradigm can be seen in several recent books (Brewer & Hunter, 1989; Creswell, 2003; Greene, Caracelli, & Graham, 1989)

When both quantitative and qualitative data are included in a study, researchers may enrich their results in ways that one form of data does not allow (Brewer & Hunter, 1989; Tashakkori & Teddlie, 1998). Using both forms of data, for example, allows researchers to simultaneously generalize results from a sample to a population and to gain a deeper understanding of the phenomenon of interest. It also allows researchers to test theoretical models and to modify them based on participant feedback. Results of precise, instrument-based measurements may, likewise, be augmented by contextual, field-based information (Greene & Caracelli, 1997).

The researcher agree with Mertens (2003) and Punch (1998), who suggested that mixed methods investigations may be used to (a) better understand a research problem by converging numeric trends from quantitative data and specific details from qualitative data; (b) identify variables/constructs that may be measured subsequently through the use of existing instruments or the development of new ones; (c) obtain statistical, quantitative data and results from a sample of a population and use them to identify individuals who may expand on the results through qualitative data and results; and (d) convey the needs of individuals or groups of individuals who are marginalized or underrepresented.

By this study the researcher's needs to adopt a sequential explanatory mixed strategy. It is a typically used to explain and interpret quantitative results by collecting and analyzing follow-up qualitative data. It can be especially useful when unexpected results arise from a quantitative study (Morse, 1991). The straight forward nature of this design is one of its main strengths. It is easy to implement because the steps fall in to clear, separate stages. In addition, the design features makes it easy to describe and to report. The main weakness of this design is the length involved in data collection, with two separate phases.

By examining published research, Greene, Caracelli, and Graham (1989) inductively identified the following five broad purposes or rationales of mixed methodological studies: (a) triangulation (i.e., seeking convergence and corroboration of results from different methods studying the same phenomenon), (b) complementarity (i.e., seeking elaboration, enhancement, illustration, clarification of the results from one method with results from the other method), (c) development (i.e., using the results from one method to help inform the other method), (d) initiation (i.e., discovering paradoxes and contradictions that lead to a reframing of the research question), and (e) expansion (i.e., seeking to expand the breadth and range of inquiry by using different methods for different inquiry components).

Most recently, Collins, Onwuegbuzie, and Sutton (2006) identified four rationales for conducting mixed research: participant enrichment (e.g., mixing quantitative and qualitative research to optimize the sample using techniques that include recruiting participants, engaging in activities such as institutional review board debriefings, ensuring that each participant selected is appropriate for inclusion), instrument fidelity (e.g., assessing the appropriateness and/or utility of existing instruments, creating new instruments, monitoring performance of human instruments), treatment integrity (i.e., assessing fidelity of intervention), and significance enhancement (e.g., facilitating thickness and richness of data, augmenting interpretation and usefulness of findings).

### **3.2 Data collection procedures**

Data collection is crucial to all research. Through this process, researchers accumulate empirical material on which to base their research". (Ibert, Baumard, Donada and Xuereb, 2001, p. 172).

Researcher collect data in a mixed method study to address the main and specific objectives that he will achieves. Thus the study will adopt sequential forms of data collection, in which quantitative type of data is collected and analyzed prior to a qualitative data collection.

Quantitative data will be collected by following a method of inquiry called survey. Reasons for employing survey are based on the strengths of the method that it has. Surveys are relatively inexpensive (especially self-administered surveys), useful in describing the characteristics of a large population, no other method of observation can provide this general capability, they can be administered from remote locations using mail, email or telephone, many questions can be asked about a given topic giving considerable flexibility to the analysis, there is flexibility at the creation phase in deciding how the questions will be administered: as face-to-face interviews, by telephone, as group administered written or oral survey, or by electronic means. Data collections methods include a questionnaire which contains closed ended questions that is prepared by the researcher to undertake the research. In addition, other data, which are qualitative in nature, will employ a cross-sectional method of inquiry due to shortage of time. For qualitative aspects of the research data collection techniques involve a questionnaire which contains open ended question and observation.

### **3.3 Sampling procedures**

To address a research questions the researcher decides which people and research sites can best provide information, and puts a sampling procedure in place, and determines the number of individuals( i.e. sample ) that will be needed to provide data. In quantitative research, the intent of sampling individuals is to choose individuals that are representative of a population so that the results can be generalized to a population.

According to the data from the Addis Ababa City Administration Trade and Industry Bureau there are around ninety public enterprises in Addis Ababa in all ten sub cities. The researcher selected eight big public enterprises which are considered as a representative for all the population which is found in the city. The following table depicts the detailed list of selected public enterprises

Table 3.1 list of selected public enterprises

1) Ethiopian Telecommunications Corporations(ETC)
2) Ethiopian Electric Light and Power Authority(EELPA)
3) Ethiopian Shipping Line Share Company
4) Commercial Bank of Ethiopia(CBE)
5) Construction and Business Bank
5. Commercial Printing Press
6. Berhanena Selam Printing Enterprises
7. Water Works and Construction Enterprises

### **3.4 Data analysis**

Quantitative data will be analyzed and interpreted through SPSS (Statistical Package for Social Science) and MS-Excel. Qualitative data will be analyzed and interpreted by using statistical tools such as descriptive analysis which will includes mean, median, standard variation, and for further explaining purpose the researcher will employ data tabulation, frequency distribution, percentage, graphs and charts. The main purpose of analyzing and interpreting the qualitative data are better to explain those factors, which are found and have a quantitative nature and to support our inference. Once the data are organized and presented, it is then analyzed to form meaning about the research questions and draw appropriate recommendation.

## **Chapter Four Analysis and Interpretation**

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The previous chapter has presented the philosophical justification for undertaking the research by employing the mixed research methodology, data collection techniques, sampling methods used and finally the data analysis to be used in the research. This chapter first presents the data collected by using the questionnaire, then analyzes the data by using SPSS and Excels, and finally interprets the implications of the result. The analysis will be based on the theoretical framework the researcher presented in Chapter 2.

### **4.1 Definition of public enterprises**

According to the Wikipedia web site a government-owned corporation, state-owned company, state enterprise, government business enterprise, or public enterprises is defined as a legal entity created by a government to undertake commercial activities on behalf of an owner government. Their legal status varies from being a part of government into stock companies with a state as a regular stockholder. There is no standard definition of a government-owned corporation (GOC) or state-owned enterprise (SOE), although the two terms are used interchangeably. Public enterprises were created in most countries to accelerate economic and social development. Yet increasing evidence indicates that most public enterprises either do not contribute strongly to development or perform their public service functions ineffectively or inefficiently. Policy makers engage in continuing debates over whether or not state-owned corporations contribute to economic and social development, why so many have failed to deliver effectively the services for which they were created, and how their management can be improved. These issues will become more crucial as governments in developing and emerging market countries consider how best to achieve economic and social development in an age of globalization, how to spread more widely the benefits and mitigate the potential negative impacts of international economic interaction, and how to alleviate poverty so that larger numbers of people can participate effectively in productive activities and gain access to social services essential for human development.

Over the past 50 years governments around the world established large numbers of public enterprises to accomplish development objectives, among the most important of which were to provide services and infrastructure that could not easily be extended by conventional departments and agencies of the State or by a weak or fledgling private sector. In many countries, however, state-owned enterprises took on a life of their own. Many pursued their objectives independently of government development policy or failed to perform efficiently and effectively functions for which they were created. In other countries political intervention and strenuous government control inhibited public enterprises from fulfilling their intended missions.

Although public enterprises in some countries are managed effectively and do provide services that are needed for development, too many merely became another bureaucracy plagued by inefficiency, ineffectiveness, corruption, and incompetence, draining resources from the public treasury.

Many state-owned enterprises have been commercialized, corporatized, or privatized. Some governments require them to compete with private providers, forge partnerships with private businesses and nongovernment organizations, or outsource functions to the private sector.

Public enterprises are fascinating entities. They are characterized by a considerable degree of autonomy, social and economic orientation and relative flexibility in coping with the dynamic environment. Their role in development has been discussed in many forums; their participation in bringing about economic improvement and social well-being was unquestionable.

Since the resources owned by these economic entities are scant in nature, the assets owned by the public enterprises should be used in the most effective and efficient way to achieve their intended objectives. One of the challenges that the organization faces is employees of their own commit accounting frauds either for personal gain or for unknown other reasons. Fraud will hold back the organization not to accomplish their goal. Internal control is believed to be one of the devices that surmount fraud related activities. So by designing and implementing a kind of strong internal control that best fit with the size and level of activities the organizations can achieve their goal by reducing the degree of fraud occurrence.

## 4.2 Survey Result

One of the main objectives of this research is to study whether internal control has an impact of on the possibility of occurring of accounting frauds. The most important data sources to this end are the survey conducted with accountants and auditors at all echelon of the organizations.

### 4.2.1 Respondent profiles

The questionnaire was distributed to 35 employees of the eight selected public organizations who worked as an accountants and auditors:

As you observe in the table underneath ; from the total respondents about 48.6% are worked on the accounting and related area and the remaining 51.4% (i.e. the most frequent respondent as one of the statistical tool that of the mode indicates) accounts for those employees who work on other areas like internal auditors, management, and finance officer. The result implies that both of the respondents are believed to give a valuable feedback since they are aware of the main theme of the research (i.e. internal control and accounting fraud).

Job Title	Frequency	Percent				
Accountant	17	48.6	Mean	1.51	Mode	2
Others	18	51.4	Mean	1.51	Std .Devi.	.507
Total	35	100.0	Median	2.00	Variance	.257

**Table 4.1 the respondent's job title**

Source: Respondents survey and result of SPSS

In terms of the educational background more than 90% of the respondents have Bachelor of Arts degrees in the field of the accounting and the other groups which are diploma holders accounts the remaining 10% of the total. The connotation behind table 4.2 is that the public enterprises hired those persons that are capable of performing those tasks in their field of study so that one

of the internal control components called control environment<sup>6</sup> which needs commitment to competence is fulfilled.

Educational Background	Frequency	%	Descriptive statistics			
			Mean	Std.Dev.	Median	Mode
Diploma	3	8.6	3.91	0.28	4.00	4
Bachelor of Arts	32	91.4		0.08		
Total	35	100.				1

**Table 4.2 Educational Background**

Source: Respondents survey and result of SPSS

Systems and all other control procedures are useless unless the peoples assigned to carry them out do so conscientiously, consistently, and honestly. Regarding the field of study and the respondents work experience table 4.3a and 4.3b depicts that 31%, 2%, and 2% of the survey respondents working as an accountant, auditor, and others like management. And the second table (4.3b) shows that on average (51%) the selected public enterprises employees have a work experience of 0-5 years, and 20% are 6-10 years and the remaining 10% accounts equally for those employees who have an experience 11-20 years and more than 20 years respectively.

Table 4.3 a			Table 4.3b		
Area of specialization	Frequency	%	years experience	Frequency	%
Accounting	31	88.6	0-5 years	18	51.4
Auditors	2	5.7	6-10 years	7	20.0
Management	<u>2</u>	<u>5.7</u>	11-20 years	5	14.3
Total	<u>35</u>	<u>100.0</u>	> 20 years	<u>5</u>	<u>14.3</u>
			Total	<u>35</u>	<u>100.0</u>

**Table 4.3 Respondents field of study and years of experience**

<sup>6</sup> The control environment provides an atmosphere in which people conduct their activities and carry out their control responsibilities. It is the foundation for all other components of internal control, providing discipline and structure

Source: Respondents survey and result of SPSS

#### 4.3. Evaluation of internal control based on some criteria's

**Proposal 1: The organization structure of the company clearly defined in terms of lines of authority and responsibility.**

	Scales	Frequency	Percent
	Disagree	1	2.9
The organization structure of the company clearly defined in terms of line of authority and responsibility	Neutral	6	17.1
	Agree	20	57.1
	Strongly Agree	8	22.9
	Total	35	100.0

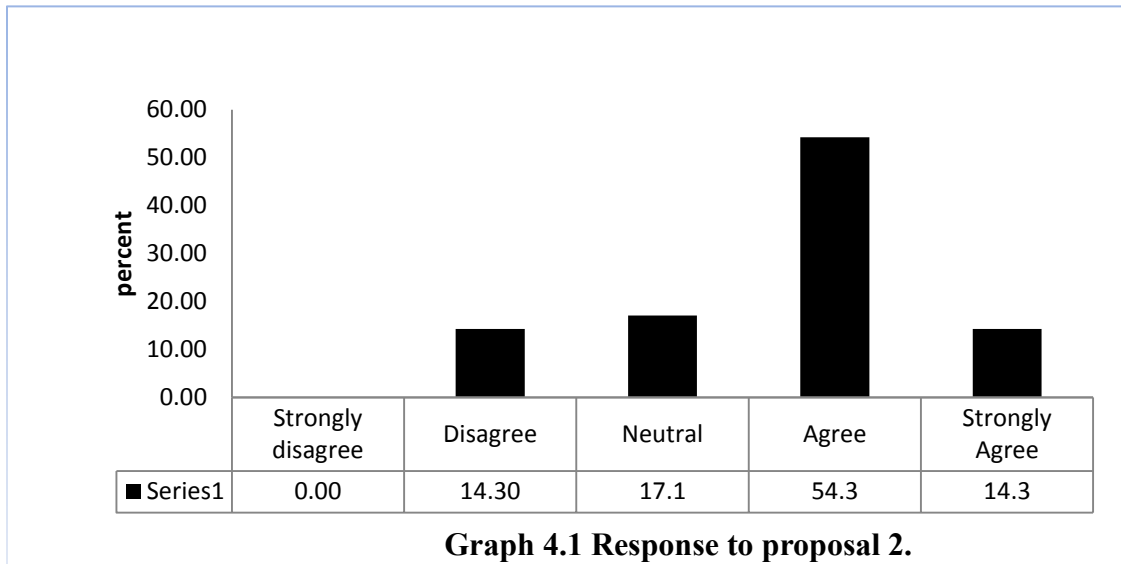
**Table 4.4 Response to Proposal 1**

Source: Respondents survey and result of SPSS

According to BusinessDictionary.com the organizational structure of the organization is defined as the framework, typically hierarchical, within which an organization arranges its lines of authority and communications, and allocates rights and duties. Organizational structure determines the manner and extent to which roles, power, and responsibilities are delegated, controlled, and coordinated, and how information flows between levels of management.

As per the response of respondents more than average of them responded that they agree on the clearly definition of their organization structure in-terms of lines of authority and responsibility. The repercussion of the respondents to this study is that as organizational structure clearly defined employees in the organization know their power and responsibility. As a result no one can apply his power and authority in the wrongful act by losing his responsibility. This in turn have a direct impact on those individuals who assume a power and position may not involve in fraudulent activities and entering in to corrupted activities.

**Proposal 2: Managements are actively involved in supervising the accounting and finance department**



**Graph 4.1 Response to proposal 2.**

Source:

Respondents survey and own computations

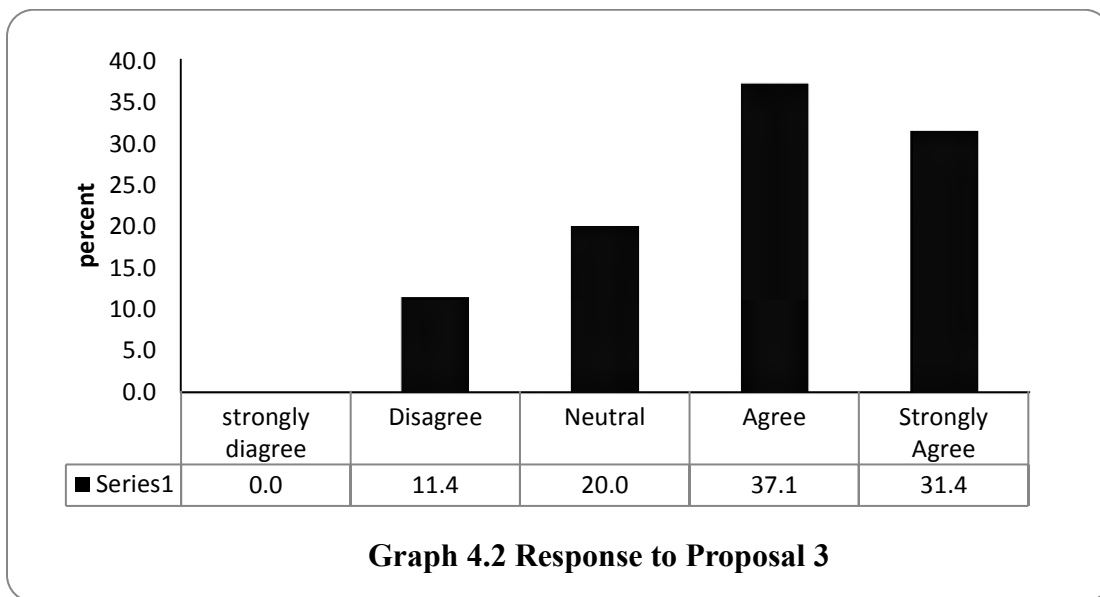
As the question offered in the above graph 4.1 whether the company's management are actively involved in take charge of the accounting and finance department or not; more than the average respondents retorted that management are performing their task of supervision as anyone expected. This indicates that the accounting and finance departments are controlled by two respective bodies namely by an accounting and finance department head and the management, and this has a positive implication on reducing on the occurrence of one of the accounting fraud (i.e. accounting frauds) due to the dual nature of controlling interest.

Qualified and continuous supervision is to be provided to ensure that internal control objectives are achieved. This requires supervisors to review and approve the assigned work of their staffs. It also requires that staffs are provided with the necessary guidance and training to reduce errors, waste, and wrongful acts.

Assignment, review, and approval of a staff's work require that duties be clearly communicated to each staff member. Each staff member's work must be reviewed to the extent necessary. The work must be approved at critical points to be sure that work flows as intended.

Assignment, review, and approval of a staff member's work should result in the proper processing of transactions and events. This includes following approved procedures and requirements. Errors, misunderstandings, and improper practices must be detected and eliminated. Wrongful acts must be prevented from occurring or recurring.

**Proposal 3: Appropriate policies and procedures have been developed and implements for each of your functions major processes?**



Source:

Respondents survey, result of SPSS and own computations

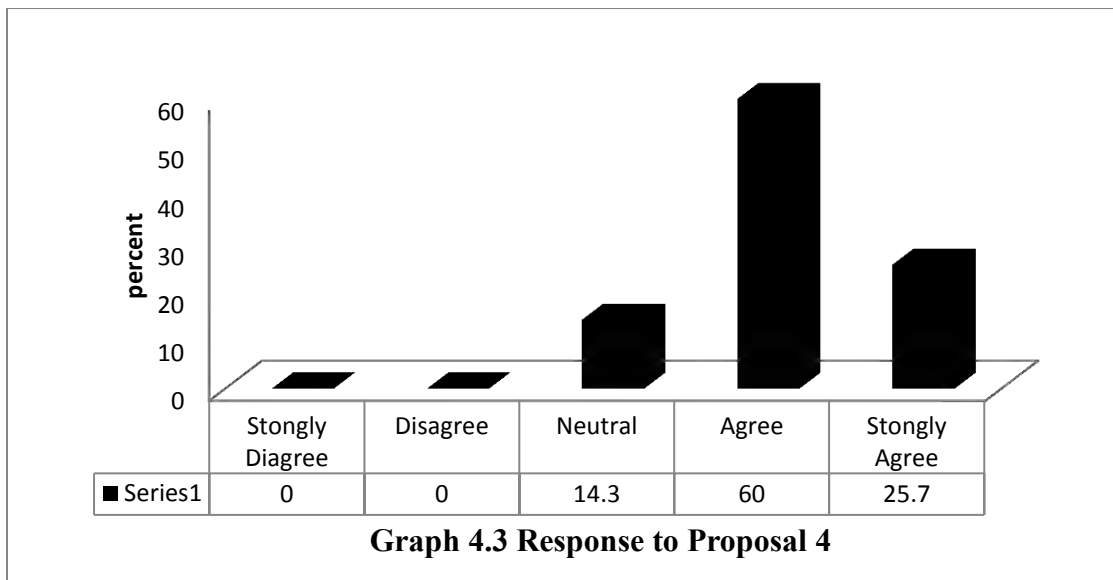
Policies and procedures are a set of documents that describe an organization's policies for operation and the procedures necessary to fulfill the policies. They are often initiated because of some external requirement, such as environmental compliance or other governmental regulations.

Regarding whether the companies implement the appropriate policies and procedures or not the graph which is found above depicts that more than 30% of the total respondents believed that their own companies do have appropriate policies and procedures. Other respondents which

account about 30% also strongly agreed on the presence of policies and procedures in the company. The researcher do not have a reply for a strongly disagree response category.

Policies and procedures including the accounting policies and other organizational activities policies helps the organizations to implement strong internal controls, quickly address the enterprises compliance requirements and minimize the risk of waste, fraud and abuse.

**Proposal 4. There are adequate controls designed to ensure for payroll related expenditures?**



Source: Excel, SPSS, and researcher own computation

The above graph 4.3 indicates those of surveyed public enterprises employee’s response on the question about the presence of adequate controls designed to ensure for payroll related expenditures. Therefore the results indicated that about 60% of the respondents agreed on the presence of adequate internal control over payroll related expenditures. The remaining employees responses include strongly agree (26%) and neutral (14%).

Payroll is one of the largest expenses in any organization. A payroll policy establishes internal checks and balances to control and protect this expense. It reduces the incidence of errors and possibility of fraud. The above result support that the companies have a good payroll policy.

Payroll fraud is a situation where an employee causes an organization to issue a payment by making false claims for compensation. This fraud took place by setting phantom employees; failing to delete employees who have been terminated and submitting excessive overtime. This kind of fraud may arise when lack of implementation in the internal control system.

Internal controls for payroll exist to ensure payroll is properly disbursed to the appropriate employees, that it's accurately recorded, and that the relevant legal requirements such as payroll tax deposits are adhered to. Payroll internal control procedures help to establish an effective payroll system, which allows payroll processing and recordkeeping to flow smoothly.

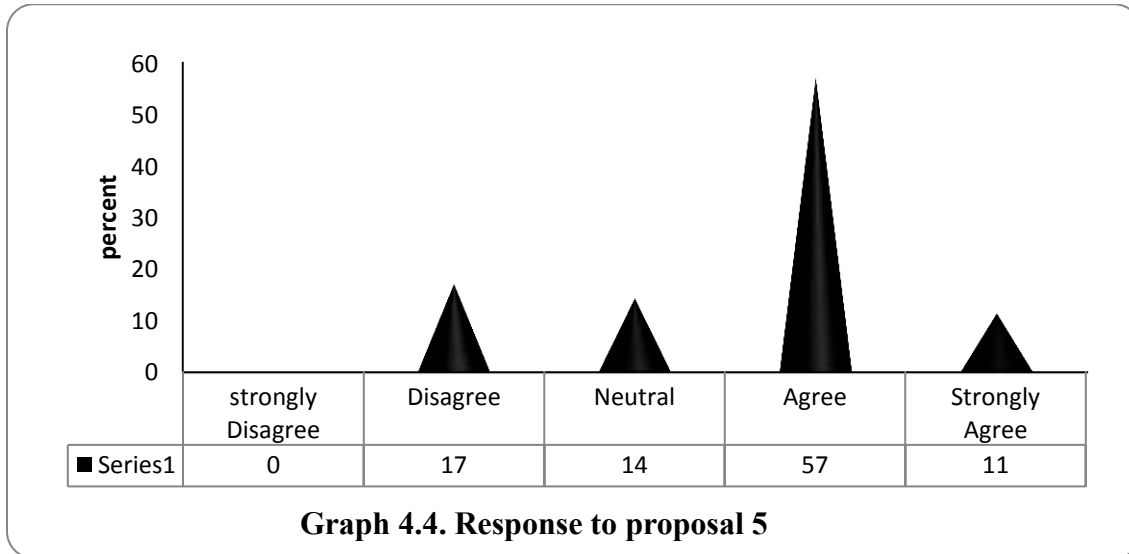
To minimize the risk of fraud, the payroll policy must include internal controls. One form of control is separation of duties. For example, if there are two employees involved in payroll processing, one would prepare payroll documents while the other would authorize and approve. An approving authority must review all pay and leave information. Another group or department such as accounting can audit payroll transactions. Payroll procedures must also protect the confidentiality of payroll information, ensuring that only authorized persons have access to them.

A payroll policy guarantees that employees will always receive the correct pay at the right time. It ensures that the company adheres to federal, state and local laws, especially those that refer to taxes, Medicare, Social Security and fair labor standards. Compliance with legislation will help the company avoid paying penalties. Payroll procedures also support the implementation of established compensation structures and systems, department budgets and collective

**Proposal 5. Imprest and similar funds maintained at reasonable balance in relation to the levels of expenditures?**

The following graph demonstrated that whether the organizations maintain the petty (Imprest) cash fund at reasonable balance in relation to the levels of expenditures. As a result of the questions; the respondents response share from the total is 17.1%, 14.3%, 57.1%, and 11.4% for

the response category disagree, neutral, agree, and strongly agree. The surveyed results indicates (i.e. 57.1% for agree and 11.4% for strongly agree) that there are public enterprise which may maintain a petty cash fund which is related to the expenditure they made during a specific period.



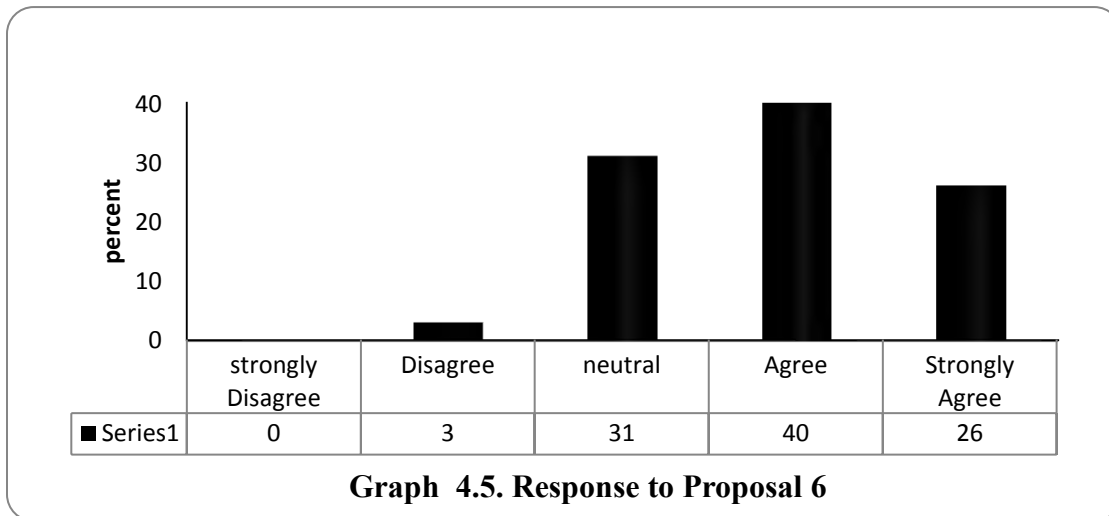
Source:

Researcher own computation, excel and SPSS result

In most businesses there is a frequent need for the payment of relatively small amounts, such as for postage due, advances to employees, for transportation charges, or for the purchase of urgently need supplies at a nearby retail store. Payment by check in such cases would result in delay, annoyance, and excessive expense of maintaining the records. Yet because these small payments may occur frequently and therefore amount to a considerable total sum, it is desirable to retain close control over such payments. This may be done by maintaining a special cash fund called petty cash funds.

In establishing a petty cash fund, the first step is to estimate the amount of cash needed for disbursement of relatively small amounts during a certain period. The money obtained from cashing the check is placed in the custody of specific employees who is authorized to disburse the fund according to restriction as to maximum amount and purpose. Each time a disbursement is made from the fund, the employee's records as the essential details on a receipt from, obtains the signatures of the payee as proof of the payment, and initials the completed form.

**Proposal 6. The usage of check is accounted for by person other than those who have custody of unissued check.**

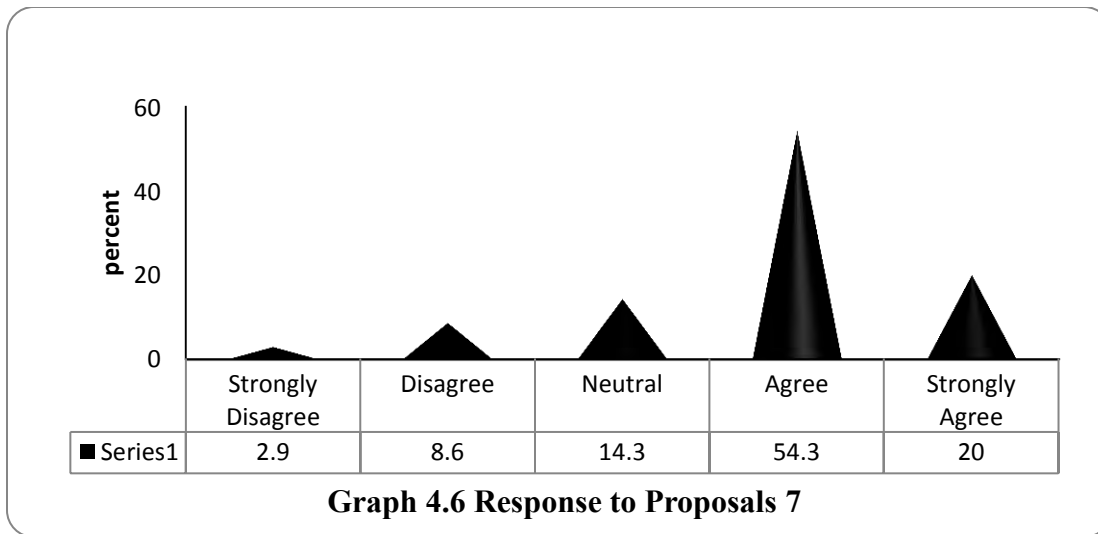


Source: Respondents survey, Excel and SPSS Result

The above Graph gives you an idea about whether the companies make use of segregation of duties in the operations of checks. Of the total respondent 3% disagreed with the segregation of duties, indicated that the companies over all check operations are handled by a single person. The other part of respondents which accounts 40% and 26% agreed and strongly agreed respectively on the issue of accounting operation for check is performed by different persons.

A check is a written instrument signed by the depositor, ordering the bank to pay a certain sum of money to the order of a designated person. To decrease the possibility of inefficiency, errors, and fraud, control procedures should exist to guarantee their responsibility for sequence of related operations is divided among two or more persons. For example no one individual should be authorized to order merchandise, verify the receipt of the merchandise, and pay the supplier by check. Control procedures should exist to ensure that responsibility for maintaining the accounting records are separated from the responsibility for engaging in business transactions and for the custody of the firm’s assets. By such separation, the accounting records serve as an independent check on the business operation.

**Proposal 7. Areas where materials and supplies are held protected against access by unauthorized personnel.**



Source: Respondents survey, result of SPSS and own computations

The above graph indicated that more than half of the respondents (54.3% and 20%) agreed and strongly agreed respectively on the subject that assets are held protected from unauthorized personnel's but there are also respondents which says the organizations assets are not protected well and are susceptible for other unauthorized persons involvement which is paved the way (opens the doors) for fraudsters.

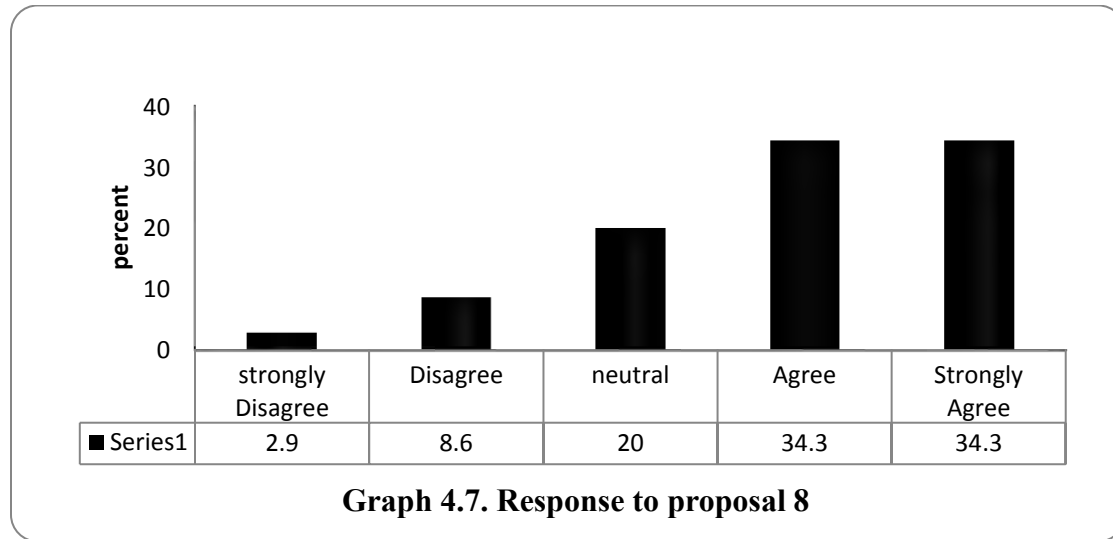
An individual is to be assigned custody, accountability, and maintenance for assets. Periodic comparison should be made of the assets with the records to determine whether the two agree.

The basic concept behind restricting access to assets is to reduce the risk of unauthorized use or loss, and to help achieve management goals. Restricting access to assets depends upon the vulnerability of the assets and the perceived risk of loss. These two factors should be assessed periodically. For example, access to and accountability for documents, such as checks, can be achieved by:

- I. Locking them in a safe,
- II. Assigning a sequential number,
- III. Assigning custodial responsibility.

Assigning and maintaining accountability for assets involves directing and communicating responsibility to specific individuals within the public enterprises.

**Proposal 8. Your organization have a formal code of conduct for employees regarding acceptable operating practices and expected standards of ethical and moral behavior.**



Source: Respondents survey, result of SPSS and own computations

As can be seen from the above chart about 34.3% of the respondents said that they agreed and strongly agreed on the subject matter that will be stated on the availability of code of conduct for employees in the organizations. On the other hand 20%, 8.6% and 2.9% of the respondents replied that neutral, disagree, and strongly disagree with the raised questions.

A code of conduct is a set of rules or a protocol that explains how people should conduct their tasks. A code of conduct often consists of things to do in certain situations and requires certain behaviors. A code of conduct can also act as a way of presenting an organization's or company's philosophy or ethical approach to the world; for example, an objective or obligation that the organization pursues in its activities.

One of the most effective mechanisms for promoting ethical behavior is a written code of ethics or code of conduct. Generally speaking, a code of ethics/conduct includes provisions related to

conflicts of interest, related - party transactions, illegal acts, and the monitoring of the code by management and the audit committee or board.

The SEC's final rule defines the term code of ethics as, written standards that are reasonably designed to deter wrongdoing and to promote<sup>7</sup>:

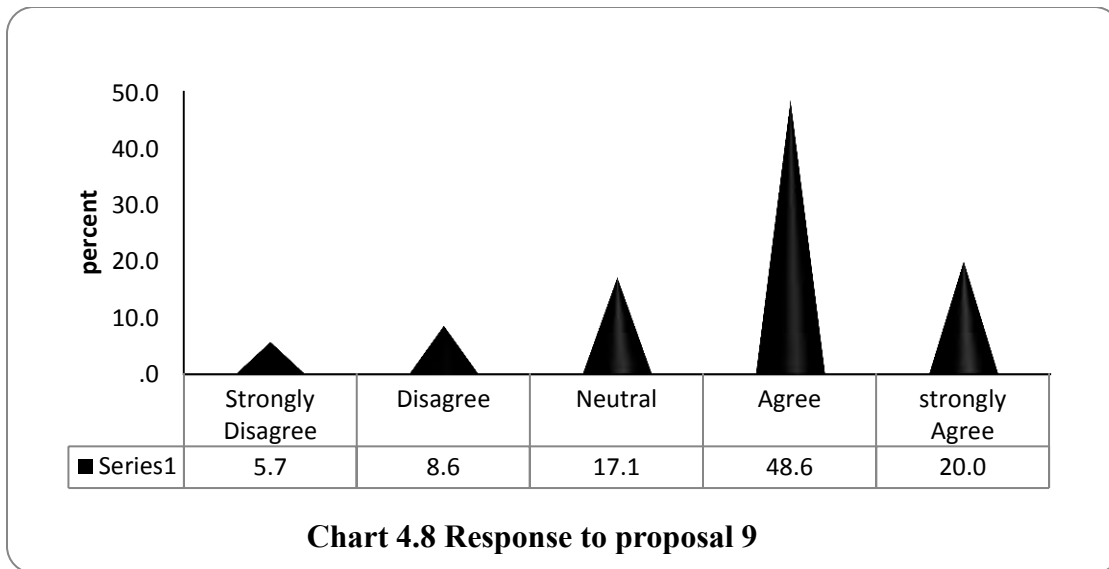
1. Honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships
2. Full, fair, accurate, timely, and understandable disclosure in reports and documents that a registrant files with, or submits to, the Commission and in other public communications made by the registrant
3. Compliance with applicable governmental laws, rules, and regulations
4. Prompt internal reporting to an appropriate person or persons identified in the code of violations of the code
5. Accountability for adherence to the code

Having a code of conduct offers many different benefits for an organization. If the organization uses its code of conduct to compare itself with other organizations, it can also be used to increase publicity for the organization and attract new customers or clients to help the organization grow. Lastly, the code of conduct also acts as damage control. If a situation occurs that puts the organization in a bad light, the company can try to spin the situation in terms of an attempt to follow their own code of conduct.

**Proposal 9. There is a clear assignment of responsibility and delegation of authority to deal with such matters as organizational goals and objective, operating functions and regulatory requirements.**

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<sup>7</sup> Read more on SEC's Final Rule, *Disclosure Required by Sections 406 and 407 of the Sarbanes - Oxley Act of 2002*



Source: Respondents survey, result of SPSS and own computations

With Regard to assignment of responsibility and delegation the above chart shows more than the average respondents replied that they are agreed(48.6%) and strongly agreed (20%) on the topical issues of clear assignment and delegation. This indicates that the organization is able and need to empower subordinates employees and assign the responsibility to the employees who are capable of handling the specified responsibility and task. The remaining part accounts for neutral (17.1) , disagree (8.6) and strongly disagree (5.7%).

Authority and responsibility are clearly assigned throughout the organization and this is clearly communicated to all employees. Responsibility for decision-making is clearly linked to the assignment of authority, and individuals are held accountable accordingly.

Delegation is the process of giving decision-making authority to lower-level employees. For the process to be successful, a worker must be able to obtain the resources and cooperation needed for successful completion of the delegated task. Empowerment of the workforce and task delegation is closely intertwined. Empowerment occurs when upper-level employees share power with lower-level employees. This involves providing the training, tools and management support that employees need to accomplish a task. Thus, an enabled worker has both the authority and the capability to accomplish the work. Although authority can be delegated,

responsibility cannot-the person who delegates a task is ultimately responsible for its success. The assigned worker is therefore accountable for meeting the goals and objectives of the task.

Effective delegation can benefit the manager, the employee, and the organization. Perhaps the most important benefit for the company is a higher quality of work. Delegation can improve quality of work by allowing the employees who have direct knowledge of products and services to make decisions and complete tasks. Quality can also improve through enhanced employee motivation. Employees may do a better job because they feel a personal accountability for the outcome, even though responsibility ultimately rests with the individual who made the delegation. Motivation should also be enhanced as delegation enriches the worker's job by expanding the types of tasks that are involved in it.

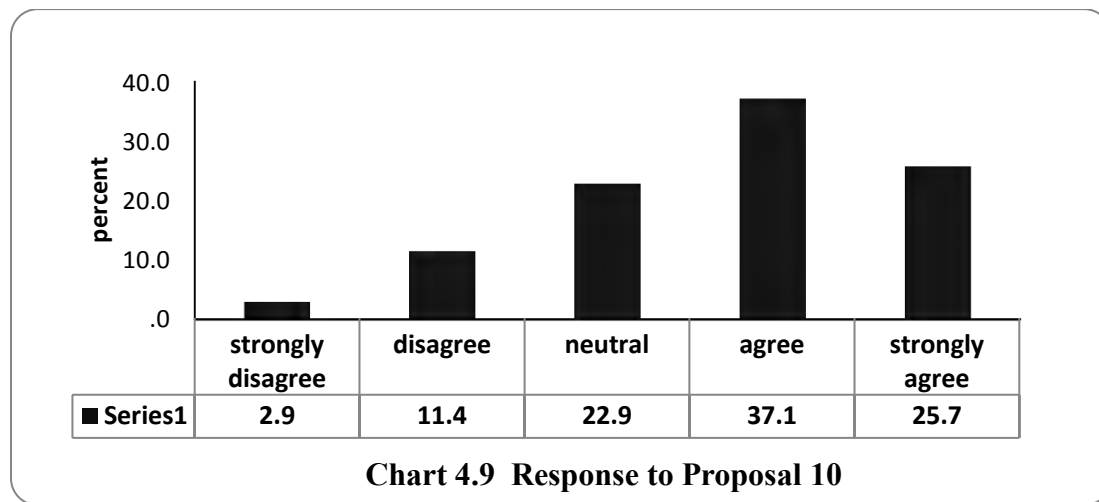
Managers who delegate effectively also receive several personal benefits; most importantly, they have more time to do their own jobs when they assign tasks to others. Given the hectic nature of managerial work, time is a precious commodity. Effective delegation frees the manager to focus on managerial tasks such as planning and control. Managers also benefit from the development of subordinates' skills. With a more highly skilled workforce, they have more flexibility in making assignments and are more efficient decision makers. Managers who develop their workforce are also likely to have high personal power with their staff and to be highly valued by their organization.

Although delegation can provide benefits to the organization, many managers lack the motivation or knowledge to delegate effectively and thus delegation (or lack of delegation) may be detrimental to the company. Managers' lack of motivation to delegate may be associated with a number of fallacies associated with delegations. Many managers believe that "if you want it done right, you have to do it yourself." While this is at times untrue, because the ultimate responsibility for a task lies with the manager, this attitude often prevents delegation. Other reasons for a lack of motivation to delegate are lack of trust in subordinates, fear of being seen as lazy, reluctance to take risks, and fear of competition from subordinates. Some of these barriers are correctable through management training and development, but others may not be easily overcome. Managers may also lack the competencies necessary to delegate effectively. They may

choose the wrong tasks to delegate, the wrong subordinate to trust, or they may provide inadequate direction to the subordinate when delegating.

Improper delegation can cause a host of problems, primary of which is an incorrectly completed task, which may hurt the overall productivity of the organization. Additionally, the careers of the manager and subordinate may suffer. The manager is likely to take the blame for delegating the wrong task, delegating to the wrong person, or not providing proper guidance. The subordinate may also take the blame for doing the task incorrectly. Thus, poor delegation may detract from the personal success of managers and employees.

**Proposal 10. The organization has an internal audit committee that is appropriate for the size and nature of the entity.**



Source: Respondents survey, result of SPSS and own computations

As defined by the Institute of Internal Auditors (IIA), Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization’s operations. With regard to internal audit committee the above graph shows that about 37.1% and 25.7% of the respondents agree and strongly agree on the presence of the internal audit committee inside the organizations believed that the companies do have their. While the remaining 22.9% need to be neutral to respond the proposal question and the other 11.4%

disagree which indicates the public enterprises are in danger due to the absence of internal auditor and also indicate that the companies may outsource their audit function to external party.

It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes.” Management is responsible for establishing and maintaining an adequate system of internal controls. An internal audit office is charged by management with —. assessing the effectiveness of the design and execution of the system of internal controls and risk management processes.”

Internal auditors are responsible for making recommendations for improvement in internal controls to top management and, if applicable, a governing board of directors. To maintain independence, and to perform in an objective capacity, internal auditors should not engage in any operational or programmatic responsibilities.

Working closely with the audit committee, the internal audit function plays an important role in contributing to the overall governance of a fraud risk management program. It provides objective assurance to the board and management that the controls in place to manage fraud risks are designed adequately and operate effectively. Internal auditors may conduct proactive audits to search for corruption, misappropriation of assets and financial statement fraud — acting both to detect and to deter fraud.

The members of the audit committee should understand their role of ensuring that the organization has antifraud programs and controls in place to help prevent fraud, and aid in its discovery if it does occur, to properly fulfill their fiduciary duties of:

1. Monitoring the financial reporting process.
2. Overseeing the internal control system.
3. Overseeing the internal audit and independent public accounting functions.
4. Reporting findings to the board of directors.

The audit committee should ensure that the organization has implemented an effective ethics and compliance program, and that it is periodically tested. Since the occurrence of significant frauds can frequently be attributed to an override of internal controls, the audit committee plays an

important role to ensure that internal controls address the appropriate risk areas and are functioning as designed.

**Question 1: Do you think that effective internal control alleviate fraud problems?**

Response	Frequency	Percent
Yes	28	80.0
No	7	20.0
Total	35	100.0

**Table 4.5 Effective internal control alleviate accounting frauds problem**

Source: Respondents survey and result of SPSS.

As you observe from the above table; of the total respondents 80% of them responded that internal control plays a decisive role in alleviating accounting fraud problems. Effective internal control is a system of internal control whereby the designs, functions and programs of internal control achieve their intended results (Aldridge & Colbert, 1994, pp. 21). Internal control facilitate the companies effective and efficient operation by enabling it to respond appropriately to significant business, operational, financial, compliance and other risks to achieving the company's objectives. This includes the safeguarding of assets from inappropriate use or from loss and fraud, and ensuring that liabilities are identified and managed. The other 20 % of the respondent's replied that internal control by itself alone do not mitigates frauds unless otherwise it is actively used with the other fraud prevention mechanisms such as operational audits, ethics training, surveillance equipment's.

It is generally accepted that internal control procedures can provide reasonable and in no case, absolute assurance, that the objectives of such controls relating to accounting systems are achieved. This could be due to the possible existence of certain inherent limitations including:-

1. Management's consideration that a control be cost effective
2. The fact that most controls tend to be directed at anticipated types of transactions and not at unusual and unforeseeable transactions.
3. The potential for human error due to carelessness, distractions, errors of judgment and misinterpretation of instruction.

4. The possibility of circumvention of controls through collusion with parties outside the entity or with employees of the entity, (e.g. a lack of segregation of duties between computer programmers and computer operations).
5. The possibility that a person responsible for exercising control could abuse that responsibility.
6. The possibility that the procedures may become inadequate due to changes in conditions and compliance with procedures may deteriorate.
7. Manipulation of transactions or estimates or judgments, required in the preparation of financial statements.

However, despite the existence of certain possible inherent weaknesses that would exist in almost every system, howsoever perfect in design, the corrective action taken for rectification by the Management and its periodic assessment through the Systems Control Evaluation method adopted in Systems Based Audit enables the fulfillment of the principal objectives of establishing and effectively operating Internal Control Procedures.

**Question 2. What factors motivates peoples to commit fraud**

Factors	Counts	Percent
Living beyond once means	1	2.9
Personal financial losses	3	8.6
Lack of internal control	9	25.7
Failure to discipline fraud perpetrators	2	5.7
Ignorance, apathy, and incapacity	3	8.6
Lack of an audit trail	2	5.7
The combinations of all the above	15	42.9
Total	35	100.0

**Table 4.6 Motivator factors for frauds**

Source: Respondents survey and result of SPSS

As you observed in the overhead table of 42.9% responded that the factors that will contribute to individuals to commit accounting frauds are the combination of those factors which are stated in the table above. Next to the combined factors the highest frequented response which account 25.7% of the total response is that the cause for the accounting fraud to be committed inside the organizations is in the weakness of internal control.

In general peoples are forced to commit accounting frauds are explained by the three factors of fraud triangle namely; motivation, opportunity and rationalization. The motivation component of fraud or embezzlement is the pressure or “need” that a person feels. It could be a true financial need, such as the need to replace belongings after a house fire. Other real needs may include financial distress from a lost job, high medical bills, child support payments, investment losses, or heavy personal debt.

The motivation could also be a perceived financial need, whereby a person strongly desires material goods but doesn't have the money or means to acquire them. A person may also have an addiction such as gambling or drugs, and that could be a motivator. Nonfinancial pressures and motivators may be in play as well, and these could include such things as the expectation for good results at work, the imposition of unachievable goals, or the need to cover up a poorly performed job. Any pressure in one's business or personal life could conceivably motivate someone to commit occupational fraud.

The opportunity to commit fraud includes the access to assets, people, information, and computer systems that enables the person not only to commit the fraud but to conceal it. Employees are given all sorts of access to assets and records in order to carry out their job duties, and that access is one of the key components of fraud. This is why it is so important to limit employees' access to only the assets, systems, and information that are necessary for them to properly perform their jobs.

As corporate structures have become more complex and managers have become responsible for a wider range of employees and functions, individual employees have been given more access and control. Increased access to resources and data, along with increased control over functional areas of companies, has created a situation in which it may be easier than ever to commit

occupational fraud. Obviously, these increased opportunities to commit fraud involve risk, but in many ways they are unavoidable in the modern business world.

The third and final piece of the fraud triangle is rationalization. This is the process by which an employee determines that the fraudulent behavior is okay in her or his mind. For those with deficient moral codes, the process of rationalization is easy. For those with higher moral standards, it may not be quite so easy; they may have to convince themselves that a fraud is okay by creating excuses in their minds. A thief may convince himself that his theft just makes up for the bonus or raise that he should have received but did not. An embezzler may tell herself that she is just borrowing money from the company and that she will eventually pay it back. Maybe the rationalization is that no one will miss the funds or assets, or that the company deserves the theft because of lax supervision and security.

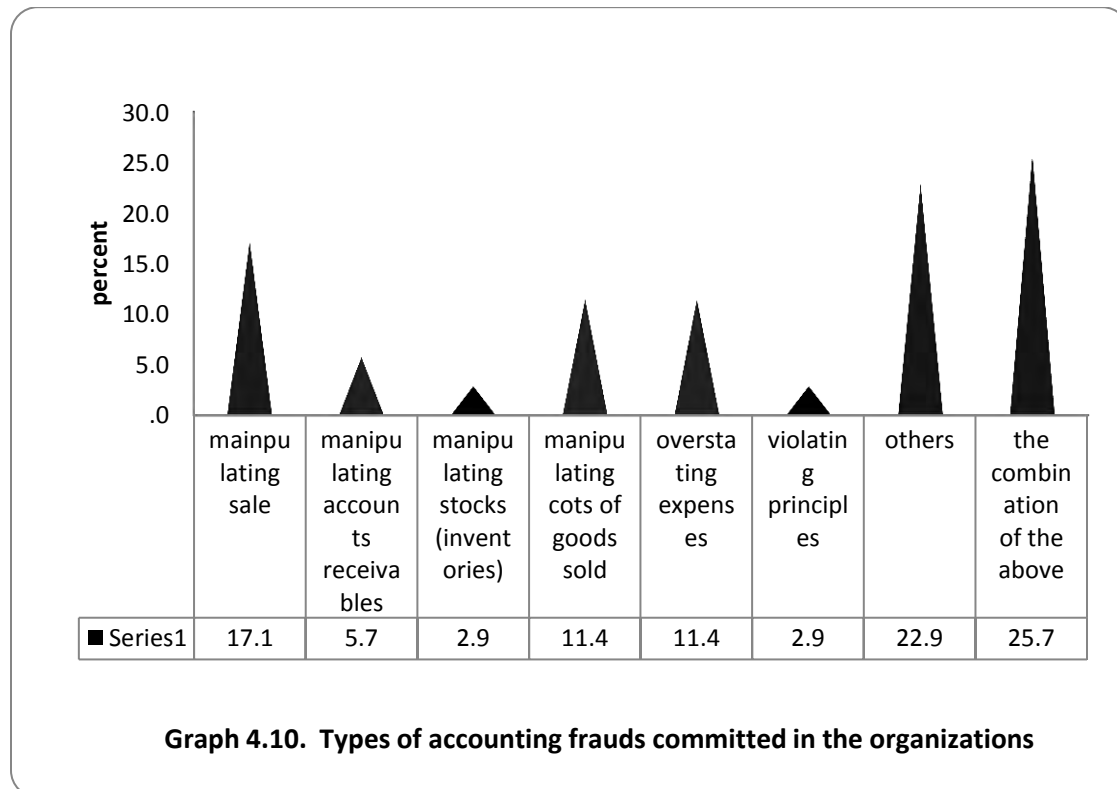
Rationalization is probably the most dangerous piece of the fraud triangle because it is the one that companies have the least control over. It is nearly impossible for management to eliminate the rationalization piece because they can't control the minds of employees. Management has no way of knowing what lies an employee may tell himself in order to justify fraud in his mind, so there is virtually no way of counteracting the lies.

Management has the most control over the opportunity portion of the fraud triangle. It can limit access to assets and put controls in place that ensure monitoring of systems and people. Motivation can be constrained by management as well, although not to the degree that opportunity can be limited. The best way to reduce needs is by paying employees fairly (to reduce perceived financial burdens) and by creating performance systems that are reasonable (not requiring job performance beyond what is realistic).

### **Questions 3. Which accounting frauds type occur in your organization?**

Accounting fraud generally falls into one of the two categories: asset misappropriation, and financial statement fraud. The first, and by far the most common, category is asset misappropriation essentially, stealing which includes larceny (i.e., after the asset is recorded on the books) and skimming (i.e., before the asset is recorded on the books).

In accounting environment, there are many types of fraud transactions (Vanasco, 1998). The first is the fraud in the manipulating accounts receivable (5.7%) and manipulating sale (17.1%). Accounts receivable is quite vulnerable to asset misappropriation schemes. The most common fraud schemes affecting accounts receivable are lapping<sup>8</sup>, fictitious receivables and improper posting of credits



Source: Respondents survey, result of SPSS and own computations

Sales and marketing fraud may be the fraudulent actions to generate fabricated commissions, or sales representatives who swindle customers for the benefit of the company or themselves. Financial statements may be misrepresented by the exaggerated accounts receivable and sales end of the year.

**Schemes:**

<sup>8</sup>*Lapping* means an accounting method that involves altering the accounts receivable section of the balance sheet when cash that is intended for the payment of a receivable is stolen. The method involves taking the first receivable collected and using that to cover the theft, while the second receivable collected is accounted to the first, the third receivable to the second, and so on. ( Available from: <http://www.investopedia.com/terms/l/lappingscheme.asp>)

- ❖ Recording gross, rather than net, revenue
- ❖ Recording revenues of other companies when acting as a “middleman”
- ❖ Recording sales that never took place
- ❖ Recording future sales in the current period
- ❖ Recording sales of products that are out on consignment

Inventory schemes and fixed asset fraud schemes are under asset misappropriation schemes. An inventory fraud which takes 2.9% of the total kind of accounting fraud; involve appropriating inventories and supplies for personal use, stealing inventory, theft of scrap and charging embezzlements to inventory. Highly publicized asset write-downs following the disclosure of faulty reserve reports should make all company managers pay special attention to how they report their most important hard assets.

Cash receipts and disbursements are also subject to fraud transaction which will overlap in the others categories of frauds which accounts 22.9% of the total respondents. There are three typical cash fraud schemes that may be encountered in these transactions; these are skimming<sup>9</sup>, larceny<sup>10</sup> and fraudulent disbursements. If the duties for cash receipts and cash application are performed by the same person, this may results in fraudulent misappropriation of cash. Internal control enforcement is to ensure that the segregation of duties for cash receipts, cash application, and cash report functions to avoid any risk of fraud.

Other common areas for financial statement fraud: the following are also schemes used frequently to “cook the books” and make results look better than they really are.

When a fraud is expected in the organization’s inventory and fixed asset, auditors need to examine what assets are held and how those assets can be taken. Some fixed assets that are easily removed from the premises are especially prone to employee theft. Whereas, unauthorized

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<sup>9</sup> A form of white-collar crime, **skimming** is a slang term that refers to taking cash "off the top" of the daily receipts of a business (or from any cash transaction involving a third interested party) and officially reporting a lower total

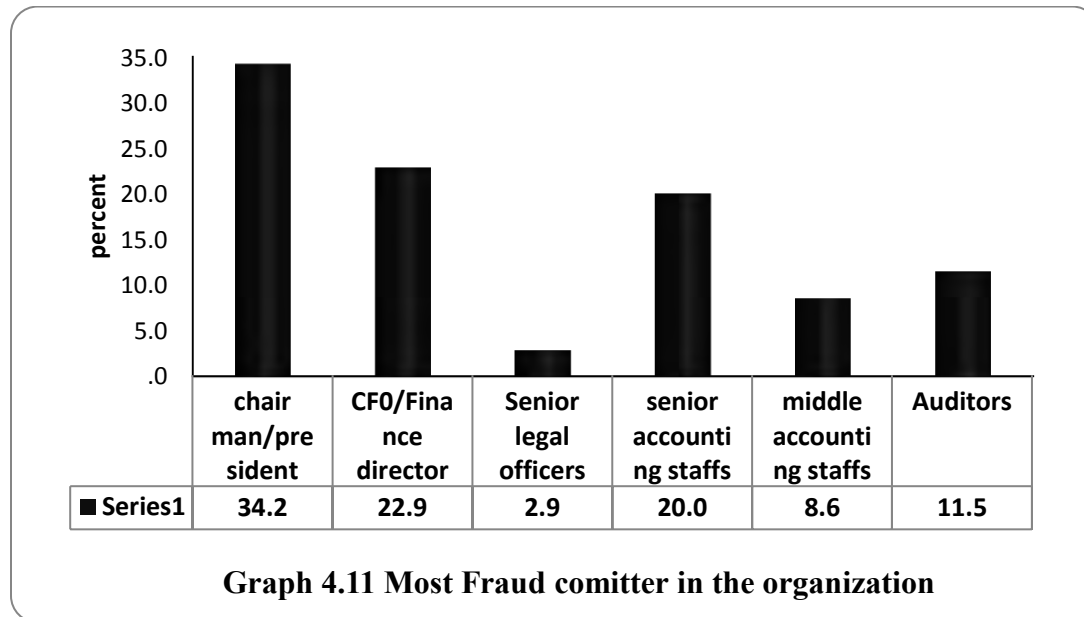
<sup>10</sup>Cash larceny is the theft of cash that has already been accounted for in the books. Since there generally is a paper trail it is considered to be one of the easiest frauds to detect and prevent through the use of internal controls.

personal use of fixed assets by employees can develop into a fraud or abuse situation if the management does not address the subject via improved controls. In addition to the improper usage of the asset itself, the loss of productive time might be more costly than the use of the asset.

Accounting fraud may happen when liabilities are unrecorded. This may happen when a company is trying to cover the real conditions from the shareholders or the public. Procedures of examining subsequent cash disbursements may help to detect the liabilities that existed at the year-end but are omitted from liabilities recorded in the client’s financial statements.

Accounts payable or purchases are a financial reporting fraud. Lack of control in accounts payable may cause fraudulent financial statements. If no verification was made on the existence of vendors, a person in charge may defraud by means of cheques written to non-existent vendors and diverted to his own bank accounts. Verification of vendors is necessary and stopping the practice of hand delivery of cheques will help mitigate the risk as well.

**Question 4. In your conclusion which party is said to be the most perpetrators (fraud committer) of accounting frauds?**



Source: Source: Respondents survey, result of SPSS and own computation

As depicted in the above graph 34% of the respondents replied that chairman or president are the most fraud committers; while the next most fraud committer as evidenced by the most frequented feedback which shares 23% and 20% from the totals respondents of 35 are CFO and senior accounting staffs. The other 11% for auditors and 9% for middle accounting staffs.

Who are the fraud perpetrators? Fraud perpetrators are the persons those commit fraud. According to the 2002 survey from the ACFE showed that the older the perpetrator, more costly their schemes become. The losses for older employees were 27 times higher than losses caused by the younger age employees. The reason being, older employees hold more senior positions with greater access to assets. Commonly, in an organization, the majority of higher positions (managerial and above) are held by males. Findings in the survey report revealed that most fraud cases were committed by males. The losses committed by males were three times more than females, i.e. males committed more than 75 per cent of all fraud. Generally, those in higher positions in an organization tend to have higher levels of education. The ACFE report showed that those with college degree caused about 3.5 times higher losses than those with only high school diplomas. As the perpetrator's education level increased, the losses are also increased. Losses caused by age, gender and education background appeared to be correlated to the employee's position in the organization. Position effects were the strongest indicator of the size of the losses in most of the fraud cases.

**Question 5. In your opinion what ethical value must be followed by the employees of the organization in order to mitigate (diminish) the fraud related problems on top of the organization internal control?**

In this regard all the respondents stress that organization should have an ethical value to combat accounting frauds on top of the company internal control. An organization's culture evolves from the values of its members and the culture, in turn, exerts a strong influence on the actions, decisions, and behaviors of all employees.

An ethical culture requires engaged employees and managers who understand why doing the right thing is important for the organization's long-term viability; and they have the determination to see that in fact the right thing does get done.

What are some of the key attributes needed for an organization to be fully integrity-based?

1. Employees feeling a sense of responsibility and accountability for their actions and for the actions of others.
2. Employees freely raising issues and concerns without fear of retaliation.
3. Managers modeling the behaviors they demand of others.
4. Managers communicating the importance of integrity when making difficult decisions.
5. Leadership understanding the pressure points that drives unethical behavior.
6. Leadership developing processes to identify and remedy these areas where pressure points occur.

These attributes touch other aspects of the organization that go beyond the fundamental abilities of making a profit and maintaining high levels of quality and productivity: how well the organization adapts to change, or encourages employees to be engaged in decision making, how well the organization creates a collective sense of purpose around shared values. It is this broader set of skills and qualities that create the foundation needed to support an ethical culture. This indicates that if the organizations maintain their ethical value to the maximum they can then the possibility of accounting frauds is to the minimum.

## Chapter 5 Conclusions and Recommendation

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### 5.1 Conclusions

The purpose of this research paper was to look at the impact of strong and effective internal control has on lessening accounting frauds (i.e. fraudulent financial reporting and misappropriation of assets). Based on the analysis presented on the preceding chapter the overall conclusions are presented below.

The organizational structure provides the decision-making framework of an organization. This structure groups, divides, and coordinates the tasks required to achieve identified goals. To be effective, the structure must make the best use of available resources while maintaining adequate controls to ensure compliance with state finance and other applicable requirements. In this respect the organizational structure of those of surveyed public enterprises are clearly defined in terms of line of authority and responsibility.

In the real world, many internal control activities still depend largely on the effectiveness and judgment of individuals. The quality of these individuals is a relevant issue for the simple reason that people, not machines, are currently the most effective defense against most fraud and corruption. Consistent hiring and promotion of high - integrity individuals can be a visible demonstration that management is serious about setting the right tone and maintaining a control environment throughout the company. The human resources function obviously plays a prominent role in hiring and retaining a high - quality workforce. So it makes sense for companies to ensure that appropriate standards exist for hiring and promoting personnel. For all employees, particularly senior management and those individuals with influence over financial reporting or who are involved in the preparation of the financial statements (including board of directors, audit committee, general counsel, CFO, and controllers), these standards may include a background investigation confirming prior education, work experience, evidence of integrity, and a search for evidence of criminal activity. Such steps taken should desirably be documented and reviewed by appropriate personnel. Management may also consider performing background

investigations for existing employees being promoted into a position of trust and on a periodic basis for those serving in such positions. In this respect the researcher conclude that public enterprises have competent personnel in accounting areas. What I observed as a problem is that companies did not provide a sufficient training opportunity to the employees and this may in turn affect the individual's competence and performance on their work area.

Segregation of duties is a primary principle in any internal control plan in order to provide adequate checks and balances. The basic goal of segregation of duties is that no one person should have excessive control over one or more critical processes. The fundamental premise of segregated duties is that an individual or small group of individuals should not be in a position to initiate, approve, undertake, and review the same action. These are called incompatible duties when performed by the same individual. In this regard from what the researcher finds in the previous chapter he can conclude that the public enterprises apply the segregations of duties which is considered as the most important part of IC in line with the theories and the IC principles

The respondents suggested that from their experience believed the following list of factors as the reasons for committing fraud which includes living beyond one's means, personal financial loss, lack of internal control to prevent or detect frauds, failure to discipline, ignorance, apathy, and incapacity, lack of an audit trail and rationalization

Based upon the result that is obtained in the previous chapters, the researcher observed that financial statement frauds tend to be very similar in terms of how they are perpetrated. Most fraudulent cases involve manipulating sales, manipulating accounts receivables, manipulating inventories, manipulating cost of goods sold, violating principles, understating liabilities and overstating expenses

In general as per the level of the researcher understanding and the finding what he has got in the previous chapters the researcher conclude that if public enterprises designed, implemented and monitored strong internal control on the continuous basis then the probability of accounting frauds become low or minimized.

## **5.2 Recommendations**

It does not make sense for any research project to have the researcher spends pages on finding the reasons which caused the issues, and yet not give any suggestions or solutions for these problem issues. Therefore, in this chapter, as the result of my study, the researcher present various comments and ideas directed toward finding such solutions based upon the response what I obtained from analyzing the data.

According to the first internal control standard, which relates to control environment, management and employees of the public enterprises should establish and maintain an environment throughout the organization that sets a positive and supportive attitude toward internal control and hard-working management. There are several key factors that affect the accomplishment of this goal. Managers and evaluators should consider each of these control environment factors when determining whether a positive control environment has been achieved. The public enterprises have establish and uses a formal code or codes of conduct and other policies communicating appropriate ethical and moral behavioral standards and addressing acceptable operational practices and conflicts of interest

Management of the organization should take appropriate disciplinary action in response to departures from approved policies and procedures or violations of the code of conduct and the organization should arrange training and counseling services in order to help employees maintain and improve their competence for their jobs

The organization management must clearly specify the lines of Authority and responsibility; if they are clearly stated and assigned throughout the organization and there is clear communication between all employees across the organizations.. Responsibility for decision-making is clearly linked to the assignment of authority, and individuals are held accountable accordingly. Along with increased delegation of authority and responsibility, management has effective procedures to monitor results.

There are two types of competencies – position and personal. Position competencies are the skills needed to perform the required duty, regardless of the incumbent. Personal competencies are the skills, knowledge, expertise, and experience of the individual employee, regardless of whether they are tied to the employee's current position. Employees should have the skills to adequately perform their assigned duties. To make the employee force make competent it is better for the public enterprises to arrange training, to expose them to more updated and coup up with the advanced technologies.

Effective human resource policies strengthen an organization's internal controls. These policies should address hiring, training, performance evaluations, responsibilities, appropriate behavior and disciplinary actions. If employees understand that they are responsible and accountable, the control environment is strengthened.

Each employee should be responsible for reviewing their business practices and processes to determine where accounting frauds exist and where and how controls can be established to mitigate them.

The management of each public enterprise should be responsible for establishing and maintaining an effective internal control structure. To fulfill this responsibility, estimates and judgments by management are required to assess the expected benefits and related costs for internal control policies and procedures. The objectives of an internal control structure are to assist management in meeting objectives by providing reasonable assurance that assets are safeguarded against loss from unauthorized use or disposition. The internal control structure also ensures that financial transactions are executed in accordance with management's authorization and are recorded properly to permit the preparation of financial statements in accordance with generally accepted accounting principles (GAAP).

A well-designed internal control structure will reduce improper activity. The responsibility of designing and implementing internal controls is a continuous process. As conditions change, control procedures may become outdated and inadequate. Management should anticipate that certain procedures will become obsolete and modify the internal control structure in response to these changes.

Physical security is the protection of personnel, clients, records, and assets. This includes protection from fire, natural disasters, burglary, theft, vandalism, and terrorism. In the eye of researcher the physical security for majority of the surveyed organizations is not go beyond having a guard in the front door, so he recommends that they need to use various preventive techniques especially for accounting records and physical assets such as fraud reporting policy, increased attention management, increased role of internal audit committee, and fraud auditing.

Qualified and continuous supervision must be provided to ensure that internal control objectives are achieved. Supervision is the ongoing oversight, management and guidance of an activity by designated employees to help ensure that the results of the activity achieve the established objectives

The successful operation of an accounting system requires procedures to ensure that people are able to perform the duties to which they are assigned. Hence it is necessary that all accounting employees be adequately trained and supervised to perform their jobs

The theme of the research also considered as an initiation for other scholars who needs as to study on such areas as evaluating internal control and study on accounting fraud especially financial statement fraud which is believed to be committed by management.

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## Appendix: Questionnaire

**Addis Ababa University**  
**School of business and Public Administration**  
**Department of Accounting and Finance**

### Questionnaire

The purpose of this self-administered Questionnaire is to gather data relating to the impacts of internal control in alleviating accounting fraud in government owned organizations (or public enterprises). The research will be conducted to achieve the following objectives (1) To assess the impacts of strong and effective internal control in alleviating accounting frauds (i.e. defalcation and fraudulent financial reporting); (2) To examine the current internal accounting control of each organization; (3) To enumerate and discuss which accounting frauds are committed inside the organization; (4) To dig out what factors contribute to individuals to commit fraud and what sorts of mechanism should be design to mitigate the overall problem; (5) To investigate what ethical consideration should be followed by employee of the organization on top of the company internal control to overcome fraud related problems

It will take no more than 10 minutes to complete. Thank you in advance for your voluntary participation. It needs your willingness in contributing your knowledge to the improvement and advancement of both accounting and auditing profession. All responses you provide are confidential and will be published only in summary, statistical form. You or your firm will not be identified in any way. Accordingly, there are no foreseeable risks to you or your firm. Additionally you are not required to write your name, addresses by any way.

**THANK YOU**

### Respondent profile

Please use this mark in the box “√” Where it applies

1) Job Title: \_\_\_\_\_

2) Gender : Male  Female

3) Age:

20-29

40-49

30-39

50-59

4) Highest educational level obtained

High school complete

Bachelor Degree

Certificate

Masters Degree

Diploma

PhD

5) Area (Field of specialization) or major field of study

Accounting

Economists

Management

Others please specify \_\_\_\_\_

CPA

6) Years of work experience

0-5 years

11-20 years

6-10 years

More than 20 years

7) Marital status

Single

Widowed

Married

Divorced

Evaluate the following proposals marking “✓” In the light of internal control function:	Strongly disagree	disagree	Neutral	Agree	Strongly agree
1. The organization structure of the company clearly defined in terms of lines of authority and responsibility					
2. Managements are actively involved in supervising the accounting and finance departments					
3. Appropriate policies and procedures have been developed and implemented for each of your function’s major processes					
4. There are adequate controls designed to ensure for payroll related expenditure					
5. Imprest and similar funds maintained at reasonable balance in relation to the level of expenditure					
6. The usage of check is accounted for by person other than those who have custody of unissued check					
7. Areas where materials and supplies are held protected against access by unauthorized personnel					
8. Your organization have a formal code of conduct for employees regarding acceptable operating practices and expected standards of ethical and moral behavior					
9. There is a clear assignment of responsibility and delegation of authority to deal with such matters as organizational goals and objective, operating functions and regulatory requirements					
10. The organization has an internal audit committee that is appropriate for the size and nature of the entity					

11. Are sufficient training opportunities available to improve competency and update employees on new policies and procedures?

Yes

No

12. If the answer to question number 20 is yes please specify what kind of training you receives within the last 2(two) years.

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13. Do you think that effective internal control alleviate fraud problems?

Yes  No

14. In your opinions, what factors motivates peoples to commit fraud. Please put this mark √ in any of the following listed factors.

- a. Living beyond once means
- b. Personal financial losses
- c. Lack of or circumvention of internal controls that prevent or Detect fraud
- d. Failure to discipline fraud perpetrators
- e. Ignorance, apathy, and incapacity
- f. Lack of an audit trail
- g. Rationalization ( by saying like I deserve more, I'm only borrowing the money, It's for my sick child and It's for a good cause)

15. Of the following which one of the following accounting fraud type in your organization occurs?

- a. Manipulating sales
- b. Manipulating accounts receivables
- c. Manipulating stocks(inventories)
- d. Manipulating cost of goods sold
- e. Understating liabilities
- f. Overestimating expenses

- g. Overstating assets
- h. Violating principles
- i. Others

16. In your conclusion which party is said to be the most perpetrators (fraud committer) of accounting fraud? Please choose any of the following.

- A. Chairman/ President
- B. CFO/Finance director
- C. Senior legal officers
- D. Senior accounting staff
- E. Middle Accounting staff
- F. Auditors

In your opinion what ethical value must be followed by the employees the organization in order to mitigate (diminish) the fraud related problems on top of the organization internal control?

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