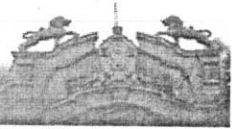


Addis Ababa
University
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An assessment of bank fraud and its management in Ethiopia Commercial Banks

**Thesis presented in partial fulfillment of the requirements for
the Masters degree of accounting and finance**

By: Muhammed Aragie

Advisor: Laxmikantham (PhD)

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June, 2011

Addis Ababa, Ethiopia

Statement of Certification

This is to certify that Muhammed Aragie has carried out his research work on the topic entitled “An assessment of bank fraud and its management in Ethiopia commercial banks” 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)

Statement of declaration

I, Muhammed Aragie, have carried out independently a research work on “An assessment of bank fraud and its management in Ethiopia commercial banks” 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.

Muhammed Aragie


20 Feb 2011

“An assessment of bank fraud and its management in Ethiopia commercial banks”

By

Muhammed Aragie

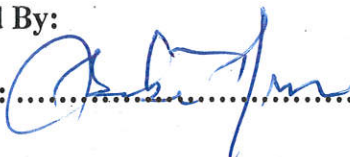
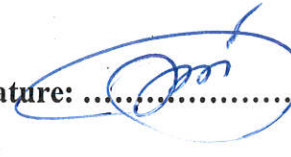
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Abstract

Organizations in Ethiopia, particularly banking corporations today are more susceptible to fraud crime than ever before. This study aims at finding practical means of minimizing the incidence of fraud in Ethiopia, both private and government owned, commercial banks. During the course of the investigation efforts were made to identify various causes result bank staffs to commit fraud, the characteristics shared by most fraud acts in the sector, means employed in defrauding banks and at the same time determine the adequacy and effectiveness of fraud detection and prevention systems employed by banking corporation.

Questionnaire survey technique was employed to seek the respondents' (managers, accountants, and customer service officers at sample branch banks) perceptions on the all encompassing issues of fraud and its management in banking sector. Findings in the first place revealed that so many factors contributed to incidence of fraud in the banks amongst which are poor management of policies and procedures; inadequate working conditions; bank's staff staying longer on a particular job, and staff feeling frustrated as a result of poor remunerations. Next to this, fraud prevention and detection systems adopted by banks are not effective and adequate to make effective management on frauds committed through creating forged checks, opening new account, money transfer, employment application, etc. Finally, the study offered suggestions as to how the problems so identified could be mitigated.

Key words: *Commercial bank, Fraud, Ethiopia*

Acknowledgment

It is universally true, as no one alone could not accomplish things come in his/her mind without interference of other's hand, particularly without almighty God. Thus first and for most, I give thanks to almighty God, who spared my life to attend this academic qualification by providing his unlimited mercy and blessing throughout the period of my studies.

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Chapter one Introduction

When one talk about the growth and development of a nation's economy, hardly can there be any living soul that will not agree with the spur catalyst is the nation's bank, whether in a developed or developing economy, through financial intermediation, provision of an efficient payments system and serving as conduit for the implementation of monetary policies to mention a few. The study under taken by Cameroon (1972) also concluded with this fact, growth in the financial industry, if transmitted well, would result in the growth of real sector and the opposite is possible if the financial sector is repressed and inefficient. Thus the component of the financial system that is at the centre of the intermediation role and the greasing of the engine of economic growth and development is the banking sector.

However, the ability or inability of banks to successfully fulfill their responsibility of functioning well for the country economic health has been a central issue in some of the financial crisis that has been witnessed so far in worldwide. As Diamond (1984) noted a special feature of banking activities is to act as delegated monitors of borrowers on behalf of the ultimate lenders (depositors). In this special relationship with depositors and borrowers, banks need to secure the trust and confidence of their numerous clients. Though this requires safe and sound banking practices, it is not always the case as bank failures in different countries have come to prove.

Study of Idowu, 2009 ascertain that fraud and its management have been the impulsive factor in the distress of banks, and as much as various measures have been taken to minimize the incidence of fraud, it still rises by the day because fraudsters always device tactical ways of committing fraud.

Furthermore, Bishop and Hydoski, 2009 in their book stated that fraud has existed in one form or another since the earliest days of organized societies. Despite the fact that it is illegal in most countries, despite the vigorous enforcement of anti fraud laws in many countries, despite corporate self - policing, and despite significant attempts in many companies to create more ethical cultures, fraud continues to be an inevitable and unpleasant component of modern life.

Duleep Thomas, former senior vice president and general auditor at Wyndham Worldwide Corporation, describes this harsh reality this way, “senior management needs to acknowledge that fraud can occur anywhere, at any time, and at any company. It is not okay to say, ‘We operate in an environment of trust.’ Once you accept this reality, then you need to understand where fraud could be perpetrated both internally and externally with respect to the business.”

Beyond the above statements, turning on the television or reading the newspaper today published in Ethiopia, it is common to find a story relating to fraud or financial manipulation largely in the banking sector. The records available at Federal Ethics and Anti-corruption Commission of the country also assure the reality of the dynamic rate fraudulent practice poses.

Although this phenomenon is not unique to the banking industry or peculiar to Ethiopia alone, the high incidence of fraud within the banking industry has become a problem to which solution must be provided in view of the large sums of money involved and its adverse implications on the economy. In this perspective, the objective of this study is to find a practical means of minimizing incidence of fraud in commercial banks of the country, through administering the questioner (closed ended type) for managers, accountants and customer service officers of sample private and government owned commercial banks found in Addis Ababa City Administration.

The researcher hopeful as the study under taken on the appropriate time to provide a prominent means to tackle the fraud epidemic spread on the growing banking industry of the country.

The purpose of this chapter is to provide background information on the study. For this intention, the remaining parts of the chapter are organized as follows. The first section (2.1) of the chapter presents a brief overview of the Ethiopian banks as a background for the research. The second section (1.2) provides a theoretical foundation of the study as to aid the researcher in assessing the fraud and management gap of commercial banks found in the study area. The third section (1.3) sets out the statement of the problem to which the researcher tried to contribute a solution through the study. Objective of the research and statement of hypotheses are presented in the section four (1.4) and five (1.5) respectively. Section (1.6) comprised of delimitation of the study. In the next two sections, section (1.7) and section (1.8) of the chapter, the researcher invites readers to go through limitation and significance of the study respectively. Following this, section (1.9) provides the concept of the term fraud used during course of investigation. Finally, section (1.10) provides the overall structure of the study.

1.1 Brief overview of Ethiopian banking system

Ethiopia is situated in the North-Eastern corner of Africa, sharing a common border with Djibouti, Somalia, the Sudan, Kenya and Eritrea. It has a total land area of 1.14 million square kilometers and a population of 77.1 million. Ethiopia stands as the fourth largest in size and the second most populous country in Sub-Saharan Africa. The Ethiopian economy is a typical dual economy, in the sense that it has a predominant agricultural sector, and only a minor industrial and service sector.

The dominating agricultural sector accounts for about 50 per cent of GDP; the remaining output is attributable to others, mainly to the service sector (Central Statistics Agency, 2008).

When looking at the historical profile of Ethiopian banking industry, modern banking system introduced in 1905. At the time, an agreement was reached in between Emperor Minelik II and a representative of the British owned National Bank of Egypt to open a bank, which led to Bank of Abyssinia inaugurated in Feb.16, 1906 by the Emperor. In the 30's the Ethiopian government bought the bank and the State Bank of Ethiopia was established by a proclamation issued in august 1942. This bank was later disintegrated to two different banks forming the National Bank of Ethiopia and the Commercial Bank of Ethiopia. Through times, more foreign and domestic banks were established. To name a few Banco di Roma, Banco di Napoli, Banca Nazionale del lavoro and Agricultural Bank were the prominent ones (Sofia and Seid, 2005).

The first private Ethiopian bank was Addis Ababa Bank Share Company, was established on Ethiopians initiative and started operation in 1964 with a capital of 2 million in association with National and Grindlay Bank, London, which had 40 percent of the total share (Sofia and Seid, 2005).

However, the banking business could not move further because of the institutionalization of private investments by the Socialist regime that came into power leaving only three government banks; the National Bank of Ethiopia, the Commercial Bank of Ethiopia and agricultural and Industrial Development Bank. This was reversed when the Socialist regime was overthrown in 1991 and the issuance proclamation for the licensing and supervision of banking business, which led to the beginning of a new era (Sofia and Seid, 2005).

Immediately after the enactment of the proclamation private banking companies began to flourish, leading to twelve private banks and four governmental banks operating in Ethiopia as of 2011. These are Awash International Bank, Bank of Abyssinia, Berhan International Bank, Buna International Bank, Cooperative Bank of Oromia, Lion International Bank, Dashen Bank, Oromia International Bank, Nib International Bank, United Bank, Wegagen Bank, and Zemen Bank and Commercial Bank of Ethiopia, Construction and Business Bank, Development Bank of Ethiopia and national bank of Ethiopia respectively. There are also ten private banks currently not joined the sector but they are in the way to enter. These are Nile bank, Enate Bank, Hawassa Bank, Dehub Global Bank, Nohe Bank, Addis International Bank, Zenzem Bank, Kokeb Bank, Hewan Bank, and Merkato city Bank (National Bank of Ethiopia, 2011).

1.2 Theoretical foundation of the study

The role of banks in economic development has been richly articulated in the literature. Pioneer contribution of Schumpeter (1934) was of the view that financial institutions are necessary condition for economic development. This view has been variously corroborated by other scholars like Goldsmith (1969), Cameron et al (1972, and Patrick (1966) to mention a few.

Thus, it is not surprising that governments the world over attempt to evolve an efficient banking system, not only for the promotion of efficient intermediation, but also for the protection of depositors, encouragement of efficient competition, maintenance of public confidence in the system, stability of the system and protection against systemic risk and collapse.

The major problems confronting the financial institution is “fraud”, which has sent many of them out of business and is making the industry customers to lose confidence in them, since they have not been able to curb the ugly event called “fraud”. Fraud is the number one enemy of the business world, no company is immune to it and it is in all works of life. Also fraudsters are experts at manipulating people, documents, situations and the slightest opportunity. They are equally good at covering their tracks. The appearance may therefore be normal but the reality quite different; deception is the key to any fraud. Furthermore, fraudsters are opportunists who take advantage of temporary weaknesses or unnoticed gaps between the apparent strength and the real effectiveness of controls (Nwankwo, 1991).

According to the Webster’s dictionary, fraud is an act of deliberate deception with the intention of gaining some benefit. The root of the word fraud is “fraus, fraudis” the Latin word for trick. It is therefore clear that fraud in one form or the other has been with us for a long time and is characterized by deception or concealment perpetrated deliberately and often perpetuated with other accomplices with a view to obtaining unfair advantage and for benefit to which they are not entitled. As business people, must recognize fraud as a permanent risk, a risk that must require an action to manage. It is a common place that we live in a world of accelerating change, but change is creating greater incentive for fraud and greater opportunities to defraud (Akinjobi and Omowumi, 2010).

However, the fear is now prevalent that the increasing wave of fraud in the financial institutions in recent years, if not arrested might pose certain threats to stability and the survival of individual financial institution and the performance of the industry as a whole and no area of the economy is immune from fraudsters and even the banking system. Much of what we do is “cutting leaves” instead of dealing with the root problem. Fraud takes its roots from the human heart. It is an axiom that the heart is deceitful above all things and is largely sinful. Fraud does not just happen, but perpetrated by human beings with reasons or motivations (Idowu, 2009).

There are several types of fraud. When the employee of a small shop abuses the trust his boss has in him or her to commit embezzlement, he or she is engaging in a fraudulent act. When a person receives benefits from the government without being entitled to them, he or she is also involved in a fraud. Both cases involve the conscious distortion of truth, or concealment of material fact, with the objective of inducing other people to act to the detriment of their own interests. These are the elements that characterize fraud (Pedneault, 2009).

Furthermore, Donli (2003) in his study “The state and future of the banking industry in Nigeria” describe the speed at which fraud risks evolve is accelerating and will likely continue to do so. To minimize or control the alarming rate of fraud in the banking industry, there ought to be need for the players in the industry to set up and implement an effective and efficient control system that will adequately monitor the daily activities of the industry without leaving any gap. Consequently, appropriate personnel policies and practices should be put in place, since people of moral decadence commit fraud.

1.3 Statement of the problem

Fraud has become one of the greatest threats to the world economy. It is a global problem, not only in terms of its impact on major corporations and key financial institutions, but also its effect on smaller companies and ultimately the wider public who indirectly pay for the losses through increased costs of goods and services (Okoye, 2006).

Fraud in this study can be seen as the intentional misrepresentation, concealment, or omission of the truth for the purpose of deception/manipulation to the financial detriment of an individual or an organization (such as a bank) which also includes embezzlement, theft or any attempt to steal or unlawfully obtain, misuse or harm the asset of the bank (Drover and Bostley, 1972).

However, the banking sector is the machinery of the country in achieving meaningful development, the failure to achieve any of developmental goals is due to an array of problems. Of these problems, the issue of fraud in banks is one that has eating into the fabrics of our economy and the need to manage its curse is imperative. It is not also to exaggerate if one says many organizations fail to recognize that fraud can prove to be even more catastrophic than other forms of critical incidents such as terrorist attack, fire or flood.

Events of that nature may cause serious disruption to the business but rarely are they insurmountable. In addition to this, the larger society expects greater accountability, fairness, transparency and effective intermediation from banks. However, a significant fraud against a company not only undermines financial stability, it can ultimately result in such damage to the reputation and loss of investor's confidence that it proves irretrievable. Thus, the business in the banking sector carry out their responsibilities with sincerity of purpose and devoid of fraud is an important ingredient for gaining public trust and goodwill (Moorthy et al, 2009).

Beside, the current global recession is highlighting the vulnerability of the global banking and finance system that is subject to greater risk and acts of fraud. There are new challenges in tackling fraud stemming from a fast changing information technology environment, Kageyama (2009) reports that in the past three years more than 900 companies surveyed at a worldwide level have lost an average of 8.2 billion dollars a year, a 22% increase with respect to the previously published research. Moreover, the percentage of firms that registered at least one fraud in 2008 has reached 85% that is an 80% increase on the previous year. While these figures hide the motivation for fraud, the rates of growth are significant and in a time of recession this rate is more likely to increase as higher numbers of individuals commit fraud.

However, in today's complex environment, there are too many known and unknown frauds in business, which make difficult to classify and to identify proper solutions to avoid it. This assures that fraud risks are virtually impossible to avoid completely, but fraud risks can be managed like other business risks. Some opportunities for committing them can be shut down. If we accept the idea that fraud cannot be eliminated completely, then a realistic definition of success would be the ability of a company to reduce vulnerability and increase its capacity to bounce back from a potential disaster (Bishop and Hydoski, 2009).

One factor that led the researchers to come up with this study was that the mere existence of risk management programs and anti-fraud controls may give some banking organization a false sense of confidence. So now may be the right time for companies to re-evaluate their programs and determine whether they are sufficiently detailed to withstand new complexities, new fraud risks, and external scrutiny. Accordingly, the researcher impatient to raise the issue of fraud and its management in the banking sector of Ethiopia holding an objective of finding a practical means of minimizing the incidence of fraud epidemic in the sector.

The study particularly aims to identify various means employed in defrauding banks, to determine the characteristics most frauds in the sector share, and the factors make bank staffs to commit fraud through administering a closed ended type questioner for a sample unit of manager, accountant and customer service officer of selected commercial banks found in Addis Ababa City Administration, and after analyze using descriptive frequency statistics proffering possible solutions of reducing the incidence bank fraud are in essence what this research work is all about.

1.4 Objective of the study

This study involves a survey of manager, accountant and customer service officer at sample branch banks of both privately and government owned commercial banks operate in Addis Ababa City Administration, with a view to determine what they perceived as the causes of fraudulent practices in the bank and the extent of the problems and its management.

Holding this, the aim of the study was to finding a practical means of minimizing the incidences of fraud in the country commercial banks, especially currently in operation at Addis Ababa City Administration. To achieve this singular objective, the following secondary objectives have been specified:

1. To identify the major incidence of fraud in the banking business
2. To determine the characteristics banking most fraudulent practice possess
3. To identify various means employed in defrauding banks and their frequency.
4. To determine adequacy of fraud detection and prevention systems of the bank
5. To suggest measures of reducing the incidence bank fraud.

1.5 Research methodology

In order to achieve the main research objectives a quantitative methods approach is adopted. The purpose of using such a quantitative type of methods approach is to gather a research data that could not be obtained by a adopting a qualitative methods approach of research design. A brief explanation of regarding the main data collection methods adopted given below.

The study uses surveys of designated personnel (managers, accountants and customer service officer) working at private and government owned commercial banks operate in Addis Ababa City Administration. The survey is a self administered face to face questionnaire mode. The surveys are intended to elicit data relevant for, among others, identify the major methods employed in defrauding banks, determine the characteristics most banking fraudulent practice possess, and to identify the major incidence of fraud in the banking business.

The purpose of a adopting the survey method is to gather a research data that is not available from the archive records regarding fraudulent acts and its management and in order to make inferences about Ethiopia commercial banking sector population based on the responses of a sample of respondents (Fowler, 2001).

Finally, the study analysis records held by Federal Ethics and Anti - corruption Commission. The analysis concentrates on various fraud and corruption cases issued by the authority against the fraudsters to get judgment in front of the court.

1.6 Delimitation of the study

The content of this study will not be seen as being totally exhaustive of all possibly situations available in the Ethiopian banking sector on the theme of the study. Hence, it will be of great importance to get more relevant information if the study covers all of the commercial banks found in all over the country and their all employees and customers as well as employed further data instruments, like focus group discussion among designated personnel of sample banks.

However, due to the constraints of resources (like financial and time), the boundless nature of the fraudulent issue, and for the sake of in depth and manageable work, the study confined (delimited) to twelve private and one government owned sample commercial banks (a total of 37 banks) and their designated personnel (manager, accountant, and customer service officer in respective sample banks) found in Addis Ababa City Administration taking into account its accessibility to the researcher. For the purpose of critically examine fraud and its control in the Ethiopian commercial banking industry, the study covers the nature of fraud, types, causes, management control measures, and characters tics of fraud on banking sector of the country.

1.7 Limitation of the study

Limitations are those conditions beyond the control of the researcher that may place restrictions on the conclusion of the study and their applications for other situations as well as probing areas for future study to be conduct related to current study.

In general term, limitations are what impede the perfection of this study. As a result, like most studies, the findings of this research may have been limited by some factors. Some of which are detailed below:

First and foremost, since the study conducted based on the data obtained via almost closed ended type of questioner from sampling unit of managers, accountants and customer service officers of thirteen sample commercial banks found in Addis Ababa City, the findings of the proposed study may not unfold all the problem areas of the study.

Moreover, there were limitations as to time due to the demands of the academic calendar of the University as well as the cost of carrying out a survey for the entire finance industry (like Insurance, Microfinance institutions etc). Consequently, the research has been limited to the commercial banking industry and precisely to 37 sample 1 bank branches found in Addis Ababa City Administration.

Lack of relevant local review of literatures, particularly which were done on the assessment of bank fraud and its management in Ethiopia commercial banks also embed the researcher to the great extent in order to well enriched the study and to make some comparative analysis can be also the major limitation of the study. However, efforts have been made to ensure that this situation does not hinder the completion and quality of the research work. As a result the effect of this limitation will be reduced to the barest minimum.

1.8 Significance of the study

It is essential to note that fraud in the banking sector has become a phenomenon that needs a drastic resolution so as not to cripple that sector of the economy; particularly it can erode the assets of the banks thereby causing the sudden death of the bank, if not controlled or minimized. Hence, the study will provide invaluable benefits and usefulness to all categories of bank managers.

Through this study, bank customers would be sensitized and be caution in dealing with the bank as to the occurrence of fraud. In addition, the officials of the bank would be educated to be cautious when rendering their services and help their customers against fraud.

Since, recently the impact of bank fraud on the operations of banks and indeed the economy at large is of interest to researchers and industry practitioners, researchers and students in the field of banking and finance who want to know more about frauds, its causes and possible ways of preventing it will also find the study beneficial.

Furthermore, the study relevant to what the Ethiopian government started to bring economic sustainability in the country, specifically on their efforts to wipe out all forms of corruption and fraud, even if it requires support from all patriotic Ethiopians to join hands against this evil that is pervading the society.

The researcher also believe that this research work is significant to the readers and students (the general public) who plan to know the meaning of fraud, the causes of fraud, the types of fraud, some measures to minimize the cause of fraud. Thus, the study might bring some ideas to players in the banking business on how to prevent being defrauded in the future.

In general, determining the common types of bank fraud (as the researcher has attempted to do in this study) that are frequently carried out in the banking system, the underlying causes, level of staff involvement, consequences and possible means of ameliorating the problem, is inevitable in providing great importance to the continued financial viability of banks, particularly of Ethiopian commercial banks not reached at its maturity stage; and indeed the entire financial system.

1.9 Fraud: the concept and definition

Most people in the fraud fighting business have their own concept of what fraud is and what it is not. The result is that we have a grab bag of definitions to choose from in guiding our current task. Some are legal definitions. Others are academic, while still others are based on personal experience. Out of the lot, the most useful definitions boil down to the following.

According to the Association of Certified Fraud Examiners (2004), fraud is: any illegal acts characterized by deceit, concealment, or violation of trust. For them frauds are perpetrated by individuals and organizations to obtain money, property, or services; to avoid payment or loss of services; or to secure personal or business advantage. In other words, they defined fraud as "the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets".

According to the American Institute of Certified Public Accountants, fraud is: abroad legal concept that is distinguished from error depending on whether the action is intentional or unintentional.

The *Black's Law Dictionary* of Garner published by West-Thomson on 2004 define fraud as a "knowing misrepresentation of the truth or the concealment of a material fact to induce another to act to his or her detriment".

Fraud Advisory Panel (accessed on 30 May 2008) defined fraud as "the removal of cash or assets to which the fraudsters is not entitled--or false accounting- the classification or alternation of accounting records or other documents". Eventually, from whichever perspective, for the current study the researcher applied fraud definition of Bostley and Drover (1972).

For them fraud defined as “the intentional misrepresentation, concealment, or omission of the truth for the purpose of deception/manipulation to the financial detriment of an individual or an organization (such as a bank) which also includes embezzlement, theft or any attempt to steal or unlawfully obtain, misuse or harm the asset of the bank”

1.10 Structure of the study

As has been stated already, Fraud is the number one enemy of the business world, no company is immune to it and it is in all works of life. And it's prevalent in the financial institutions (banks) in recent years, if not arrested might pose certain threats to stability and the survival of individual financial institution (banks) and the performance of the industry as a whole and no area of the economy are immune from fraudsters and even the banking system. This study aimed finding a practical means of minimizing the incidences of fraud in Ethiopia commercial banks through selecting managers, accountants, and customer service officer as a study (sample unit), those found in sample private and state owned commercial banks operate at Addis Ababa City Administration organized in five chapters.

The first chapter is the introduction that includes overview of the country bank system, theoretical foundation, and statement of the problem, objectives, research methodology, significance, delimitation and limitations, concept of frauds and the structure of the study.

The second chapter of the study highlighted a relevant and up to date literature review of regarding bank fraud in worldwide giving much emphasis to fraudulent practices in Ethiopia commercial banks.

The third chapter made up of the research design and methodology adopted that enables to attain in a simplest way the research objectives what the researcher wants to reach on.

Regarding research data, gathered through almost closed ended type of self-administered questionnaire, analysis and interpretation provided in the fourth chapter of the study. Finally, chapter five constitutes detailed descriptions about summary of the study and recommendations for the concerned body comprised in the study population.

Chapter two Literature review

As articulated in the previous chapter the study aims at finding a practical means of minimizing the incidence of fraud in commercial banking sector of Ethiopia. The study investigates various means employed in defrauding banks, the characteristics most fraud on the banking business share, fraud detection and prevention systems of the bank and the major incidences make bank staff to committee fraud.

There are relevant literatures in the world able to contribute their own portion to the fraud body of knowledge. However, researchers have proposed variations to this particular fraud crime. However, fraud reported in this study include a broad range of offences committed by management, employees or third party against their employer bank, involving the taking of material advantage by deception, obtaining benefit by deception and causing another financial loss. The frauds concerned involve either breaches of trust by their employer, by the government, by one's customers.

The failure of banks to adequately fulfill its role of financial intermediation, provision of an efficient payments system and serving as conduit for the implementation of monetary policies arises from the several risks that they are exposed to; many of which are not properly managed. One of such risks which is increasingly becoming a source of worry is, the banking risk associated with fraud, if not arrested might pose certain threats to stability and the survival of individual financial institution and the performance of the industry as a whole and no area of the economy is immune from fraudsters and even the banking system (Onibudo, 2007).

It is also known as many banking operatives have different reasons for joining various banks. Many have the intention of working for a short time in the banking industry (get whatever they

could and find another job that is less demanding), some are in the industry because of their love for banking and all it stands for. While majority are there to enrich themselves by fraudulent means. Due to the upsurge of great viability in the banking sector, its dynamic and fast expanding level of activities, banks are faced with different kinds of challenges, among which is trying to prevent various fraudulent intentions of both staff and customers (Idowu, 2009).

Thus, fraud and management have been the accountable factors in the distress of banks, and as much as various measures have been taken to minimize the incidence of fraud, it still rises by the day because fraudsters always device tactical ways of committing fraud. This has become a point of great attention in the banking sector as well as every organization in the world, particularly in developing economy of Ethiopia. Although this phenomenon is not unique to the banking industry or peculiar to Ethiopia alone, the high incidence of fraud within the banking industry has become a problem to which solution must be provided in view of the large sums of money involved and its adverse implications on the economy (Idowu, 2009). Accordingly, this chapter, literature review, intends to undertake a critical review of related literature on the subject and examine the works of various researchers on the subject of fraud and its management in commercial banks for the purpose of establishing the back ground and context for the study.

This review of literature is vital in providing a frame work for establishing the importance of the study, comparing results with pervious related study, and in sharing inherent strengths and weaknesses of the previous study, which help in clearly identifying the gap in the literature and formulating problem statement for current study.

For this purpose, the chapter organized with 8 sections. In the first place literatures regarding fraud management theory and prominent bank fraud types presented in section 2.1 and 2.2

respectively. This is followed by section 2.3 that explores the literature on major methods by which fraud can be perpetrated from banking organizations, while section 2.4 provides an insight about some of the current fraudulent acts committed in Ethiopian banks. The literature on the incidences of fraudulent activities in banking sector discussed in section 2.5. Section 2.6 and section 2.7 attempts to provide the critical issues discussed in the previous studies regarding consequence of fraud on banking organization and ways of fraud management implemented by banking sectors respectively. Finally, conclusion and discussion of identified knowledge gap, the issue the study addressed, in the reviewed literature articulated in section 2.8.

2.1 Bank fraud and its management: theory

Fraud is an act of making money by making people to believe something that is not true. Fraud is a deliberate deception perpetrated for unlawful or unfair gain. Fraud is not an unintentional mistake, such as incorrect accounting estimate, the application of a cost to an incorrect account or a lost inventory tag during a physical count. Errors occur in a random manner, but fraud is deliberate (Association of Certified Fraud Examiners, 2004). Why it is easy to commit fraud? One of the major reasons is that employers must put trust in their employees and give them access to data and assets.

It's also important to remember that employers give responsibility to people who are trusted. Besides, employees naturally become well educated on the inner workings of a company. They analyze portions of the company's business process day after day. They know where the gaps and weaknesses are. They often know what will be reviewed by management and what will not. They are so close to their work that they are able to devise methods for concealing fraud. They see the details of their work each day and become intimately familiar with their part of the

business. It is not difficult to find a way to exploit the system. The fact that fraud is easy to commit is no excuse for employees to scam their employers. Thus, lack of real loyalty in the business world may contribute to the fraud problem because employees may have an easier time rationalizing bad acts. But executives and managers must become aware of the potential for fraud and must acknowledge the risk of fraud and the ease with which it may be committed (Association of Certified Fraud Examiners, 2004).

From all the potential loss the banking sector face, fraud is the most complex and difficult to recognize even when we are looking at it. Common people are trying to obtain small advantages like food or other supplies, educated people are trying to obtain significant advantages, especially those involved in cash handling. More educated people, more sophisticated frauds. Sometimes, the reason for missing documentation may be simple misfiling, but it may also be deliberate misplacement to cover a fraud situation (Ionescu, n.d). As a result, when developing a fraud control system, it is very difficult to know what to protect and how to protect it if one does not first perform a fraud risk assessment to see where the risks lie in the banking organization (except for a fraud that has already occurred!). That would include the assets with the most fraud risk, the fraud schemes most likely to occur, related red flags, and the residual risk considering what controls are in place to mitigate the fraud risks present.

In connection to adopting means of fraud control, regardless of the bank corporate governance structure, management's style sets the tone for the organization. Although it is a worn-out phrase, sometimes ignored, often misused, the tone at the top is still a key to preventing fraud. If one reviews the major scandals of recent years, in almost every case, an executive was involved. Thus there was clearly no antifraud tone at the top in Enron, WorldCom, Tyco, and others. If key managers, and the board of directors where it exists, continually talk about fraud, communicate

fraud policies, and encourage everyone to be involved in preventing and detecting fraud, then the entity eventually will develop an antifraud culture. Without the emphasis and support of key management, it is almost impossible to have such a culture (Onibudo, 2007).

2.2 Types of fraudulent activities committed in commercial banks

The point being made in this section is that there are many different types of fraud and classifications made by different scholars in terms either various criteria or with a criterion comfortable for their intended purpose. Almost every fraud survey and major fraud author has a different system for classifying frauds. While some are similar, some also present problems in applying the taxonomy to antifraud activities. For instance, Ziegenfuss (1996) by the time had undertaken a study to determine the amount and type of fraud occurring in state and local government. The study revealed that the most frequently occurring types of fraud are misappropriation of assets, theft, false representation; and false invoice.

However, for this study which has the objective of articulating a practical means to minimize the incidence of fraud in the growing banking industry of Ethiopia the researcher in this section wants to point out the general classification of fraudulent activities discussed by Idowu (2009). Accordingly, he classified frauds committed in banks into three, these are: by flow, by victims and by act.

As stated in his study (Idowu, 2009) published by European Journal of Social Sciences in 2009, flow frauds are described by the frequency and the value involved in the fraud. They are of two types: Smash and Grab - these are frauds not frequently committed, but are high in value over a short period of time and Drip - this is large in number, small in value and repetitive over a long period.



The classification of victims' frauds are based on the people affected by loss from fraud. This is also of two types: against bank (in this case, the bank is the victim of any loss incurred through the fraud) and against outsiders, the victim of the fraud is an outsider to the bank, that is, bank customers. Eventually, he classified frauds as act frauds in terms of the action that takes place in cases of fraud, that is the people involved in the act and the methods or forms by which these people perpetrate fraud. The perpetrators could either be the bank's employees, executive management of board, armed robbers, or theft by outsiders perhaps in collusion with insiders.

Therefore, the above postulation about the types of fraud suggested, instead of worrying about every conceivable kind of fraud under the sun, fraud managers had better to begin by concentrating on the types of fraud most likely to occur in their industry and at their company, and they tailor their fraud management efforts to focus on the levels within the company where fraudulent activities can inflict the most damage. That, however, is just the beginning.

2.3 Methods by which fraud can be perpetrated in commercial banks

Fraud schemes of one kind or another have been around since the first human tried to obtain the assets of another through fraudulent means. However, today's fraud-threat agents are much more sophisticated, as are their fraud schemes.

They are also more global, and the successfully perpetrated frauds often provide higher rewards than ever before, thanks to modern technology such as the cheap use of the Internet. One must be ever alert for new fraud schemes and learn the lessons of others who have fallen victim to the fraud schemes of old, as well as those of today. One thing about fraud schemes, as the old adage states: "Where there is a will, there is a way"! It is often amazing how ingenious defrauders are at coming up with new fraud schemes (Wells, 2005).

Accordingly, one should remember that people can be quite inventive once they have crossed that line and decided to cheat. Surprisingly, they can also be both artful and obvious in their methods of concealment. As a result, a particular commercial bank must make use of management potential to establish an aggressive and proactive fraud management system that will incorporate assets defenses and controls in order to protect the corporate assets from future fraud scheme attacks.

In light of this, methods by which fraud can be perpetrated in the banks, even other organizations are too numerous and list of each methods is usually not exhaustive as new methods are devised with time. However, the objective of identifying some fraud schemes here is to provide an idea of what challenges lay ahead of fraud managers in fighting fraud and to open at least some shine of the types of fraud schemes a particular bank or fraud management program, control system, must consider successfully defend the bank assets against fraud attacks (Kovacich, 2007).

The scholar, Onkagba (1993) in his study of “Auditing computerization information system: A growing audit challenge” point out that the most important and common methods employed by fraudsters in commercial banks include the following, which are almost true for fraudulent acts and attempts targeting banking sector as identified by Federal Ethics and Anti-corruption Commission in Ethiopia.

Account opening fraud: The fraud committed related to new account opening is generally defined as fraud that occurs on an account within the first 90 days of the account being opened, and the account is found to have been opened with the intent to commit fraud.

This involves the deposit and subsequent cashing of fraudulent checks. It usually starts when a person not known to the bank asks to open a transaction account such as current and savings account with false identification but unknown to the bank (Onkagba, 1993).

Automatic Teller Machine frauds: In this age of information, financial institutions and their customers increasingly rely on computers and their associated technology to conduct financial transactions. One of the most popular systems is the Automatic Teller Machine (ATM). It is a computerized device that provides the customers of a financial institution with the ability to perform financial transactions without the need for a human clerk or bank teller (Onkagba, 1993).

In connection to cash machine, Diebold Inco (2002), cited in Rasiah (2010), indicated that beyond its advantage of enabling the customer to withdraw cash, to make balance enquiry, to order statement, to make money transfer, or deposit cash, ATM is only one of many electronic funds transfer devices that are vulnerable to fraud attacks. For him, card theft, or the theft of card data, is the primary objective for potential thieves because the card contains all relevant account information needed to access an account.

Furthermore, as Rasiah (2010) in the article “ATM Risk Management and Controls” published by European Journal of Economics, Finance and Administrative Sciences insisted that there are three basic types of ATM attacks: these are attempts to steal a customer’s bank card information, computer and Network attacks against ATM’s to gather bank card information, and lastly physical attacks against the ATM.

Computer fraud: Technology plays various roles in the fraud environment. When technology is used to commit fraud, the mechanism used is typically a computer (broadly defined here as devices that perform calculations and store data). Technology increasingly integrates into society; it integrates into crimes including fraud. Computer fraud is a relatively new type of fraud consisting in a PC-intermediated theft of information and implicitly an electronic transfer of funds. People involved in computer fraud are usually motivated by the fraudulent retention of funds for their own interest and by the determination to prove their ability in breaking the banks' security systems (Onkagba, 1993).

Usually, computer-related crime is an occupational crime. That is, it is committed mainly by insiders, or former insiders, with the requisite skills, knowledge, and access. Unauthorized access can generally be gained more easily by organization insiders (employees) than by outsiders. Research on this subject finds about 70 percent to 80 percent of computer-related malicious acts are perpetrated by insiders, despite mass media commentators, who often appear to portray the opposite (Cangemi and Singleton, 2003, p. 98).

Creating forged checks: The Webster Dictionary defines forgery as “the crime of falsely and fraudulently making or altering a document (as a check). In spite that the banking industry has made technological advances in payment methods around the world, checks still remains a dominant form of payment, particularly in Ethiopia.

However, this is by far the commonest method by which the customers and the bank are defrauded. They occur mainly in company accounts and are invariably perpetrated by staffs within the company who have access to the company's check book (Onkagba, 1993).

Employment application frauds: Today's job searchers must aggressively compete for jobs. This fierce competition pits applicant against applicant, with each applicant's formal education and experience being the baseline for qualifying for a job interview. With such fierce competition, many applicants falsify their experiences and education, sometimes claiming to have a graduate degree when they do not. The applicant hopes that the corporation does not have a policy with related procedures and processes in place to verify their education and experience claims (Onkagba, 1993).

Then, if a banking organization does not have such a process and one that can be considered incorporated into fraud management system, managers do so at their bank's danger. Think about it. If the employee will falsify such records and rationalize it, how strong are their moral and ethical beliefs to stop them from perpetrating additional frauds on the bank and in doing so being able to rationalize it? For example, Kovacich (2007) in his book "Fighting Fraud: How to establish and manage an anti-fraud program" stated that, who had a system in place to interview an applicant's character references, check credit records; and verify previous employment and education, if truth be told about 15% of all applicants included false information on their application.

Fund diversion: In this case, bank staff, for personal use, sometimes diverts customers' deposits and loan repayment. Another case of this is the tapping of funds from interest in suspense accounts in the bank. For instance, this is a fraud perpetuated by cashier through the means of diverting customers' cash for personal use. This usually happens when customers paid cash or when they want to withdraw cash from their accounts. On the process of receiving the cash, cashier remove some pieces out and pay the customers as complete wrappers (Onkagba, 1993).

Money transfer fraud: Money transfer services are means of moving to or from a bank to beneficiary account at any bank point worldwide in accordance with the instructions from the banks' customers. Some common means of money transfer are mail, telephone, over-the-counter, electronic process and telex. Fraudulent money transfer may result from a request created solely for the purpose of committing a fraud or altered by changing the beneficiary's name or account number or changing the amount of the transfer (Onkagba, 1993).

Personal use of goods: For instance, the simplest form of fraud is like an employee states that he or she is just going to "borrow" the item from the bank. A hand receipt is not used or tracked, and soon everyone forgets the item had been borrowed, the employee also not willing to return even if the put a trust on their employee (Onkagba, 1993).

Theft of Goods: This is simple theft that can be perpetrated by an employee who has access to that inventory worth stealing. Methods include hiding the item in their clothing, placing it in garbage cans to recover later, and placing the items in other opened boxes that are being shipped out of the security enclosure. Computer software and hardware are some of the major theft items in today's modern banking businesses (Onkagba, 1993).

To generalize points under this section, thousands, if not millions, of frauds that have been perpetrated over the centuries. Ever since one human being wanted to have something of value belonging to another human being without providing just compensation and the owner's agreement, fraud schemes have been used to illegally gain that asset or assets.

2.4 Some of the current fraudulent acts in banks of Ethiopia

Fraud is a world-wide phenomenon that affects all continents and all sectors of the economy. Although greed undeniably counts amongst the major causes of fraud, it is by no means the only cause. This is especially true in regions where large numbers of people are locked in a struggle for financial and even physical survival such as in Africa. It is also the case that certain conditions within organizations can facilitate fraud, such as a lack of determination to deal with fraud, insufficient internal control mechanisms or a company culture. A general lack of respect for law and property in a society can promote fraudulent behavior. Equally an inefficient criminal justice system can create a situation where crime, and particularly fraud, pays.

The latter is often the case in developing countries where the scarcity of resources results in under-staffed and under-trained criminal justice structures. It is also the concept workable and proper to the commercial banks of Ethiopia found at their growing stage of banking industry life cycle (Krummeck, 2000).

Moreover, fraudulent acts and attempts in Ethiopia, particularly in the banking sector take various forms, styles, types and sizes. All the conceivable and the inconceivable forms of fraud that are simply beyond human imagination are available and freely in use. The Federal Ethics and Anti-corruption Commission as well as the National Bank of Ethiopia mentioned familiar types of fraud like fake checks and fake currency minting, real estate and land fraud schemes, counterfeiting of travel documents, tax evasion etc. These are normal and usual occurrences (National Bank of Ethiopia, 2010).

Even if, there was a time banks thought that it might be in their interest not to expose fraud acts when it happened. The reasoning behind this was that if the bank should expose the fraud that occurred within it, it might create the impression that the bank is not as a safe place and incapable of protecting its clients' assets. Instead of exposing fraud they were therefore willing to rather lay off those involved in fraud in order to allow the matter to disappear as inconspicuously as possible. In this way they hoped that their image as safe and reliable institutions would be best served. For this purpose, the National Bank of Ethiopia has finalized the first a much anticipated but a very controversial law regulating banking business that would carry new fines and even prison terms for offenders according to information available in their website.

Finally, the researcher tried to provide some of fraudulent cases issued by Ethiopian Federal Ethics and Anti-Corruption Commission and obtain judgments from the court, which in turn help to see brief overview of the extent to which the fraud crime going to hurt development of the country, particularly the banking sector.

- z On January 26, 2006, the Federal High Court sentenced a bank teller at the 'Arat killo' branch of the Commercial Bank of Ethiopia for stealing 100,000 birr from the bank, at which he was working as a teller, through forgery, which is a mix of fraud and betrayal of trust.
- z On 12 October 2006, the First Criminal Bench Federal High Court sentenced four individuals charged for illegally transferring over half a million birr belonging to other customers into accounts of other collaborators while working as computer operator of customers' deposit account at Akaki Branch of the Commercial Bank of Ethiopia.
- z Similarly, on November 3, 2006, the Federal High Court sentenced a bank teller at the

Gullele Branch of the Commercial Bank of Ethiopia for being found guilty of fraud and forgery crimes by signing a local money transfer form himself, charges brought against him by the Prosecution Department of the Federal Ethics and Anti-corruption Commission (FEAC) back in 2004. The convict reportedly imitated the signature of pertinent authorities and signed the document so that his partner in the crime could withdraw the money.

- z On November 13, 2007, the First Criminal Bench of the Federal High Court handed down a seven-year sentence to an individual who was a petty cashier at the Main Office of the Commercial Bank of Ethiopia found guilty of fraud. He received the prison term for taking to his benefit 34,431 Birr by increasing the wages of unskilled laborers in the payroll through deletion and other means.
- z On April 2008, the First Criminal Bench of the Federal High Court also sentenced former Commercial Bank employee at the foreign money transfer section with the International Relations Department of the Bank, and collaborator, for the act of withdrew over 1,050,000 birr from the accounts and used it up. According to the charge filed against them by the Federal Ethics and Anti corruption Commission, deliberately prepared forged document in order to defraud over 1,118,000 birr the Finish Evangelical Lutheran sent to the Ethiopian Evangelical Church of Mekane Yesus through three different swift messages to be paid by the Commercial Bank of Ethiopia.
- z Furthermore, the police detained two individuals in February, 2009 allegedly trying to withdraw close to four million dollars from the Commercial Bank of Ethiopia. A foreigner was also detained in September, 2009 while trying to withdraw 12 amounts of 500 dollars from the same bank using a forged traveler's check, according to the source.
- z On 31 December 2009, the First Criminal Bench of the Federal High Court sentenced six

individuals who were found guilty of illegal and fake practice in commercial bank of Ethiopia Arada Georges branch. According to the charge filed by the Federal Ethics and Anti-corruption commission, the first offender was an IT professional at the Bank from February 2001 to November 2002 G.C, used the password given by the bank to transfer a total of 3,627.300 birr at different times from the saving account of different customers to the account of five individuals with fake names.

- z And on May 14, 2010, the First Criminal Bench of the Federal High Court sentenced three corruptors. According to the file charged by the Prosecution Department of the Federal Ethics and Anti-Corruption Commission, the first convict was former finance officer and Acting Head of the Finance Department with the Judgment Execution Division of the Federal High Courts embezzled more than one million Birr from the Lideta Branch of the Commercial Bank of Ethiopia through forging documents and checks. The convict forged two bank checks by putting an imitated signature and deposited the embezzled 1,025,267.81 Birr in a bank account opened with a forged Identity Card he prepared for himself with a fabricated name.

2.5 Causes of fraud in commercial banks: why is fraud committed?

In the earlier period researchers like Cressey (1953), who was encouraged by Sutherland to use a thesis of why a person in a position of trust would become a violator of that trust. Sutherland and Cressey decided to interview fraudsters who were convicted of embezzlement. Cressey interviewed about 200 embezzlers in prison. One of the major conclusions of his efforts was that every fraud had three things in common: (1) pressure, sometimes referred to as motivation, and usually a “non shareable need”, (2) rationalization (of personal ethics) and (3) knowledge and opportunity to commit the crime. Eventually, Cressey’s findings came to be summed up in what is now widely referred to as the Fraud Triangle. Cressey’s theory teaches that when all three of these elements are in place in people’s lives, they are very likely to commit fraud (or already have).

Bologna in his Handbook of “Corporate Fraud” also articulated the incidence of bank fraud as there are many internal forces which can make fraud more likely in the workplace, such as poor internal controls, poor personnel policies and practices, and poor examples of honesty at the top levels of an organization. There are eight factors which Bologna identifies as enhancing the probability of fraud: inadequate rewards, inadequate management controls, lack of or inadequate reinforcement and performance feedback mechanisms, inadequate support, inadequate operation reviews, lax enforcement of disciplinary rules, fostering hostility, and other motivational issues. If management pays too little attention to their employees and their internal control systems, fraud will be perpetrated by those insiders in a company who have access to assets and accounting systems.

Haugen and Selin (1999) discussed the value of internal controls. There are many other reasons for employee fraud, the more common being revenge, overwhelming personal debt, and substance abuse. Business today is very competitive, and employees often stressed. As a result, they have a feeling of being overworked, underpaid, and unappreciated. If employees are also struggling with serious personal problems, their motivation to commit fraud is very high. Adding to the situation of poor internal controls, the readily available computer technology also assists in the crime, and the opportunity to commit fraud becomes a reality.

According to Willson (2006) in his study entitled "Understanding the offender/environment dynamics for computer crimes" published by Journal of Information Technology and People, examined the causes that led to the breakdown of Baring Bank, in his case study: "the collapse of Baring Banks". The collapse resulted due to the failures in management, financial and operational controls of Baring Banks. The failures that were evident according to his study include the following areas; failure in management supervision, lack of segregation between front and back offices of Baring Futures, Singapore, insufficient actions taken by Baring's management in response to warning signals, no risk management or compliance function in Singapore and weak financial and operational control over the activities and funding of Baring Futures Singapore at group level.

In the year 2009 Olatunji, in his article " impact of internal control system in banking sector of Nigeria" published by Pakistan journal of social science, the importance of the internal control department (unit) of any organization, especially banks cannot be undermined. The findings revealed that the major cause of bank frauds is lack of an effective internal control system.

In light of this, it is difficult to classify bank fraud and to determine its precise causes, because it is usually not produced by a single person, in a single day. Bank fraud is generated by a multitude of factors and generally by a group of persons with different levels of implication. Some of them may play a passive role, whereas some others may be actively involved; some of them may be from the inside, whereas some others may be outsiders. However, bank fraud is not possible without the complicity of certain persons from the inside usually placed on top positions and performing decision-making functions.

Therefore, for the purpose of current study the researcher reviewed the detail of the incidence of fraud in banks described by Adewunmi (1986) in his study titled "Fraud in banks". The author in his study categorized causes of bank fraud into two that is, institutional factors and environmental (societal) factors. He further categorized societal (environmental) factors into socio economic lapses (inadequacies).

2.5.1 Institutional factors of fraud in bank

According to Nwaze, 2008, the institutional factor or causes are those that can be traced to internal environment of the organization. They are to a great extent factors within the control of the management of the bank. According to Adewunmi (1986), a major institutional cause of fraud is poor management. This comes in form of inadequate supervision. A junior staff with fraudulent tendencies that is not adequately supervised would get the impression that the environment is safe for the perpetration of fraud. Poor management would also manifest in ineffective policies and procedures, which a fraudulent minded operator in the system will capitalize on. Even where there are effective policies and procedures in place, fraud could still occur with sometimes deliberate skipping of these tested policies and procedures.

Adewunmi (1986) also postulated inexperienced operators are susceptible to committing unintentional fraud by falling for numerous tricks of fraudsters. An inexperienced operator is unlikely to notice any fraud attempts and take necessary precautionary measures to checkmate the fraudster or set the detection process in motion. Overstretching is another reflection of poor management. This can aid perpetration of fraud to a large extent. A staff that is overstretched is not likely to perform at optimum level of efficiency. Ordinarily, the longer a man stays on the job, the more proficient he is likely to be. An operator who has spent so long on a particular job may be encouraged to think that no one else can uncover his fraud. The existence of this kind of situation in a bank is clear evidence of poor management and such situations encourage fraudulent practices.

Poor salaries and poor conditions of service can also cause and encourage fraud. Employees that are poorly paid are often tempted to fraudulently convert some of the employers' monies to their own use in order to meet their personal and social needs. This temptation is even stronger on bank employees who on daily basis have to deal with cash and near cash instruments. In our society, it is argued that greed rather than poor working conditions or poor salaries is what lures most people into fraudulent acts. This explains why fraud would still exist in the banking sector, which is reputed to be one of the highest paying sectors. Some people have an insatiable appetite to accumulate wealth and would therefore steal irrespective of how good their earnings are. Frustration could also lead to fraud. Where a staff feels short-changed in terms of promotion and other financial rewards, they become frustrated and such frustration could lead to fraud as such employee would attempt to compensate himself in his own way (Adewunmi, 1986).

2.5.2 Environmental factors of fraud in bank

Environmental factors are those that can be traced to the banks immediate and remote environment. If the whole society of which the bank is a part is morally bankrupt it will be difficult if not impossible to expect the banks to be insulated from the effects of such moral bankruptcy. The banking industry is not immune from the going on in its external environment.

Our present society is morally bankrupt. Little or no premium is put on things like honest, integrity and good character. The society does not question the source of wealth. Any person who stumbles into wealth is instantly recognized and honored. It is a fact of our time that fraud has its root firmly entrenched in the social setting where wealth is honored without questions. Ours is a materialistic society which to a large extent encourages fraud (Adewunmi, 1986).

The desire to be with the high and mighty caliber of the society, extreme want that is often characterized by need, cultural demands or the cultivation of a life too expensive for the legitimate income of the individual (Adewunmi, 1986).

In connection to this Bologna (1994) cites the environmental factors that enhance the probability of embezzlement, they are: inadequate rewards; inadequate internal controls; no separation of duties or audit trails; ambiguity in job roles, duties, responsibilities, and areas of accountability; failure to counsel and take administrative action when performance levels or personal behavior fall below acceptable levels; inadequate operational review; lack of timely or periodic review, inspections, and follow-up to assure compliance with company goals, priorities, policies, procedures, and governmental regulations and failure to monitor and enforce policies on honesty and loyalty.

In general, there is no single reason behind fraud and any explanation of it needs to take account of various factors and a common model that brings together a number of factors to commit fraud is the Fraud Triangle, which built on the premise that fraud is likely to result from a combination of three factors: motivation, opportunity and rationalization.

Therefore, what fraud management party does know is that financial institutions of all kinds are constant targets of fraud perpetrators from inside and outside and that management must devote substantial financial, human, and technological resources to detection, prevention, and deterrence of frauds of all types and origins.

2.6 Effects of fraud on commercial banks

The study conducted by Budima (2006) entitled: "Can Corruption and Economic Crime be controlled in Developing Economies, and if so, is the Cost Worth it?" The purpose of the study was to examine the effect of corruption on developing countries and to identify the reasons why economic crimes were more frequent in developing countries. The study indicated that it is difficult to evaluate the losses resulting from fraud in developing countries. However, regardless of the way and the reason why the individual perpetrates the fraud from the organization, the end result is usually the same, impact the organization financially, operationally, and psychologically. It is the most fatal of all the risks confronting banks.

The study conducted by Idowu (2009) and published by European journal of social sciences summarized the cost of bank fraud as follows;

- Z** Fraud leads to loss of money, which belong to either the bank or customers. Such losses may be absorbed by the profits for the affected trading period and this consequently reduces the amount of profit, which would have been available for distribution to shareholders..

Losses from fraud which are absorbed to equity capital of the bank impairs the bank's financial health and constraints its ability to extend loans and advances for profitable operations. In extreme cases rampant and large incidents of fraud could lead to a bank's failure.

- Z Frauds in banks can also lead to a host of other negative consequences, including losses of reputation, customer support and access to capital, brand power, market position, competitive advantage, momentum, innovation, and talent. The same, of course, can be said about corruption. In today's highly leveraged global economy, major fraud or corruption can set off a chain reaction resulting in serious corporate harm or failure.
- Z A plus to these problems, it is inevitable as fraud in the banking sector increase the operating cost of a bank because of the added cost of installing the necessary machinery for its prevention, detection and protection of assets. Moreover, devoting valuable time to safeguarding its asset from fraudulent men distracts management. This unproductive diversion of resources always reduces outputs and low profits which in turn could retard the growth of the bank.

Overall, bank frauds greatly jeopardize the organizational growth of a bank as it leads to bank distress. This is because fraud reduces the deposits of depositors and eventually leads to the erosion of the capital base of banks. The cost of fraud is also usually difficult to estimate because not all frauds are discovered or even reported since most banks have a tendency to cover up the frauds emanating from their banks and cash tills all in a bid to continue to gain customers goodwill and engender their client's confidence all the time (Asukwo, 1999).

Finally, Tommie and Aaron (2010) in their book of “Fraud Auditing and Forensic Accounting” point out that fraud in general clearly continues to cost organizations and society huge sums of money, both recently and throughout the history of commercial business, in the banking sector.

2.7 Controls of fraud in commercial banks

Up to this section in the chapter, the researcher tried to discuss the issues related to types of fraud common in banks, some of the current fraud acts in the banks of Ethiopia, the reason behind to commit fraud, the consequences of fraudulent activities or such circumstances are some of them. The question that remains; what measures can be implemented to mitigate the growing trend of fraud disaster, particularly in the banking sector?

Consequently, after understanding fraud as a real problem, threatening virtually every organization and social program that exists, it is time to start looking at what has been done in response to the growing size and frequency of fraud schemes, as well as identifying practical approaches that can be implemented to prevent future fraud occurrences. However, the task of fighting fraud has become an escalating war. Even those firms with the most advanced tools and processes to detect and prevent fraud feel that they are falling behind. Technical advancement and globalization of fraud will continue to provide new challenges to a firm’s ability to manage.

In view of the gravity of fraud in banks, people often wonder why so much fraud occurs and why it is not caught sooner, thereby limiting the losses, the management of various banks have employed different measures, such as establishment of internal control unit, fraud alerts, security measures etc. Yet fraud has continued in an upward trend, and this has called the effectiveness of these measures into question (Okubena, 1998).

In connection to measures employed by managers to curb fraud, Cressey (1953), in his thesis of "why a person in a position of trust would become a violator of that trust" described that 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). For Cressey (1953), 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.

According to Julia Penny (2002), sixty three percent (63%) of frauds occur due to lack of internal controls or because controls are not operated as set out in the organizations policies. While Bierstaker et al. (2006) surveyed 86 accountants, internal auditor and certified fraud examiners to examine the extent to which they use fraud prevention and detection methods, and their perceptions of the effectiveness of these methods. The results indicated that firewalls, virus and password protection, and internal control review and improvement are quite commonly used to combat fraud. However, continuous auditing, discovery sampling, data mining, forensic accountants, and digital analysis software are less often used, despite receiving high ratings of effectiveness due to lack of resources and their reluctance to invest in fraud prevention and detection control systems.

Although fraud and corruption cannot be fully eradicated, it is known that some opportunities for committing them can be shut down and companies can do a better job of identifying fraud risks generally and managing them. In addition to preventing some occurrences of fraud, companies can minimize the damaging effects of fraudulent events and curtail their impact on the corporation (Bishop and Hydoski, 2009).

However, the general consensus seems to be that companies have made some progress in protecting themselves against fraud, but still there has not been a noticeable decrease in fraud overall. Some might argue that the progress has not been fast enough, and that is why no real results have been seen. Companies may think that they have improved in terms of fraud prevention and detection, but that self assessment can often be overly optimistic. Until a marked decrease in fraud is seen worldwide, the idea that companies have been effective at reducing fraud is doubtful. In light of this, Nwankwo (1991), in his book titled "Bank management principles and practices" set out the opinion that general procedures for the fraud control should follow identification and detection, then lastly management procedures.

2.7.1 Fraud identification

It is not always so easy to prove intent. One of the first defenses that often surfaces in a fraud case is that the perpetrator simply made a mistake or error and there was no intent to defraud. In some situations, that may truly be the case. Plenty of errors are made daily in business, so that defense can't immediately be ruled out. Fraud is meant to give illegitimate benefit to the parties involved, and that benefit may be indicators of a participant's intent to defraud (Nwankwo, 1991).

Thus, it is important to determine whether an individual obtained any benefits from a suspected fraud. Typically, errors are exactly those errors that don't personally benefit the person responsible. However, a transaction that creates a direct or indirect benefit for the person involved should be viewed as suspicious (Nwankwo, 1991).

According to, Izedonmi (2000) the responsibility for the prevention or detection of fraud and errors with an organization rest with the management. This responsibility is discharged by management, through the establishment of an adequate system of internal controls, including internal check and internal audit. It is therefore, pronounced that the management of any banking organization is totally responsible for the prevention and detection of fraud, majorly by establishment of an adequate, efficient and effective internal control system.

There are the internal and external management controls. Internal management controls are carried out on the inside of the company while external controls are carried out on the outside. Internal management control is classified into two major groups: Internal Checks and Internal Audit. Internal checks are the operational controls, which are built into the banking system to simplify the processing of entries in order to secure prompt services, to help in minimizing clerical errors and to act as insurance against collusion (Onkagba 1993).

Internal Audit on the other hand involves the review of operations and records undertaken within a business by specifically assigned staff, which is usually the Internal Auditor. There are people called external auditors too who examine the books of the bank to determine its truth and fairness. This kind of audit is mostly statutory in nature, which is called for by the law (Onkagba 1993).

Furthermore, the National Bank of Ethiopia as the supervisor and regulator of the banking systems is interested in ensuring that banks put in place comprehensive and effective internal control systems to minimize the incidence of frauds and whenever they occur to ensure that they are detected. From the point of view of supervisors, a good internal control system must have the following attributes: dual control, segregation and rotation of duties, an effective and independent inspection functions, clearly defined levels of authority and responsibility, existence of an efficient Audit Committee and adequate fidelity insurance cover.

It is also the responsibility of the supervisor to determine banks' compliance with rules and regulations through exhaustive review of their internal audit reports. They ensure that appropriate steps are taken by the board and management of banks to address issues raised in the audit reports. It is also their duty to ensure that fraudulent bank directors and staff are sanctioned with such report being duly circulated among banks and also that banks take advantage of risk (Binyam, 2009).

2.7.2 Fraud prevention and detection

The process of identification of frauds will enable the bank to assess its susceptibility and identify which types it has to address particularly. Having done so, the next stage would be to evolve measures to prevent the occurrence of such frauds. The existing control systems can be classified into two, those aimed at prevention and those aimed at detection.

Bolton and Hand (2002) point out that, it is important to distinguish between fraud prevention (that is measures to stop fraud occurring in the first place) and fraud detection (that is measures to identify as quickly as possible fraud once it has been perpetrated).

Accordingly, Ekechi (1990) stated that measures aimed at fraud prevention include dual control, operational manual, graduated limits of authority, lending units, reporting systems, close circuit television, establishment of inspectorate units, referencing on presentation of document of value, segregation of duties, verification of signatures, controls of dormant accounts, detection of passport sized photos, close watch on the lifestyle of staff and coding/decoding and testing of telex messages. While measures aimed at fraud detection include checking of cashiers, call-over, reconciliation and balancing of accounts at branches, interbank at head office levels, periodical submission of statement of accounts, stock taking of security items and cash in the vaults and inspection by bank inspectors.

In light of the above, the Association of Certified Fraud Examiners conducts a study periodically on frauds resolved in the previous 12 to 18 months and reports the statistics to the public in the form of a report entitled Report to the Nation.

And the study by the Association of Certified Fraud Examiner (2008) 34% of frauds are detected through a tip from an employee, vendor, customer, or anonymous person. If people are willing to report suspected fraud to the company, it makes sense to make it as easy as possible to report the suspicious behavior. The next most common way to detect fraud is by accident. About 25% of frauds are detected this way. In spite of all of the anti-fraud resources available to companies and the increased fraud prevention efforts management says are being under taken, one-fourth of frauds are still discovered by accident.

Beirstaker, et al (2006) also tried to ascertain their own opinion as there are numerous fraud protection and detection techniques. These various techniques include fraud policies, telephone hotlines, 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.

2.7.3 Fraud management in commercial banks

In view of the gravity of the effect of fraud on banks, management has employed many measures aimed at controlling fraud. However, fraud had continued to an upward trend despite the measures and this has called their effectiveness to question.

Auditors define management control measures as: *“the whole system of controls, financial and otherwise, established by the management in order to carry on the business of company in an orderly manner, safeguard its assets and secure as possible the accuracy and reliability of the records”*.

The fraud triangle includes opportunity, which is basically a synonym for internal controls. Of the three legs, a fraud auditor or professional has little if any ability to affect pressure or rationalization, though management can create a positively influencing environment for those aspects. Pressure and rationalization aspects happen predominantly in one’s mind and can be difficult to observe directly. Specific control activities can restrict the opportunity to commit fraud and are more easily observed. Thus the control environment, specifically antifraud control activities, can act as preventive fraud measures (Cressey, 1953).

During writing the book “Financial Services Anti-Fraud Risk and Control Work book”, one of Goldman’s many conversations realized that “the fight against fraud and corruption is in many ways similar to the quest for good health. Our dieting, exercising, and annual physicals won’t prevent us from dying one day but they will help us to live longer, healthier, and more fulfilling lives. Identify something that has gone wrong has been very valuable” (Goldmann, 2010).

Ed Rosenberg, vice president, corporate security for financial institution also said that “although the nature of the threat has expanded the level of complexity or sophistication of the threat has changed, whose job is it to prevent fraud and corruption? Ask that question and you might often hear, “Not me,” or “Internal Audit does that.”

But managing these risks effectively requires involvement and commitment from employees, managers, and executives in every part of the company. It is the responsibility of all levels of management, as well as all employees, suppliers, and others who have access to corporate assets to protect those assets from fraud. They are the eyes and ears of the company and are often in the best position to identify potential issues and take action to prevent or quickly put a halt to fraud and corruption.

This is best achieved through fraud prevention deterrence, detection facilitation and swift punishment when it occurs. A culture of zero tolerance, involving honesty, ethical behaviors, and strong set of core value set in a positive work place, environment with hiring, training and adequately compensating highly motivated employee could help. Internal control adequate for circumstances of the client and sound control environment ensures an orderly and efficient conduct of the entity’s business from which reliable data for preparing credible financial statement would emanate (Akinjobi, and Omowumi, 2010).

It was suggested by Nwankwo (1991) that on the discussion of the anatomy of frauds, management should evolve positive attitudes towards safeguarding the bank's assets and ensuring that staff does not exploit the weakness in internal control. He further said that the policies should stress the cardinal principles of separation of duties to ensure that one person does not originate and complete an assignment or entry. The policy should also emphasize dual control of sensitive areas such as strong rooms and locks to security documents and account, the need for daily balancing of account and the various precautions which include necessary references for opening of accounts.

Ekechi (1990) was of the opinion that, in order to attain the objective of fraud management, there is need for full compliance with established policies, rules and procedures. Also employees should be made aware of the risks of attempting to defraud the bank and the action expected if caught. Finally the policy should incorporate and emphasize investigation and possible prosecution of suspected frauds.

Another study done by Wilhelm and Kenneth (2004) entitled " Fraud Management Lifecycle Theory: A Holistic Approach to Fraud Management". This study developed a lifecycle framework and evaluated six industries which faced economic crimes in the United States including (1) telecommunications, (2) banking and finance, (3) insurance, (4) health care, (5) internet merchants, (6) brokerage and securities. The methodology used in this study was based on previous literature reviews as well as interviews, questionnaire and case study responses about fraud management lifecycle. Statistics showed that telecommunication is the industry suffering the most from fraud. Losses reported by telecommunication industry were US\$ 150 billion while insurance reported US\$ 67 billion annually.



The conclusion reached by the researcher was that efficiency of the fraud management requires balancing the activity for each stage in the management lifecycle. The importance of this cycle is not only to prevent fraud but also to identify solutions and improvements in the existing activities to prevent fraud. In other words, successful implementation of fraud management lifecycle will reduce the amount of fraud loss and will adopt a new technique to minimize fraud occurrence in the future.

According to Ekeiqwe (2000), computer technology facilities and accentuates the growth. In today's automated world, many business processes depend on the use of technology. As per his opinion this allows for people committing fraud to exploit weaknesses in security, controls or oversight in business applications to perpetrate their crimes. However, the good news is that technology can also be a means of combating fraud. Leveraging technology to implement continuous fraud prevention programs helps safeguard organizations from the risk of fraud and reduce the time it takes to uncover fraudulent activity. This helps both catch it faster and reduce the impact it can have on organizations.

Eventually, to find a lasting solution as per Sadia (2010) articulated in his research project titled "Fraud management in the Nigerian banking industry (2000 – 2008)" in partial fulfillment of the requirements for the award of bachelor of science degree in business administration) to fraud prevention in banks required effort are necessary to see a reduction in the crime wave, there has to be a collaborative effort by the bank, staff, the customers, other banks and governments to articulate internal control and policy formulation. They must accomplish the goal of control cost-feasible protection of assets against loss, damage, or destruction. Cost-feasible protection means minimal expenditures for maximum protection. Creating an organizational police state would be control overkill.

A balanced perspective on controls and countermeasures is the ideal, and may require involving employees in creating control policies, plans, and procedures. A balanced perspective weighs the costs and benefits of proposed new controls. While a trusting culture breeds loyalty and honesty, a distrusting culture is often associated with frauds. However, absolute trust with no accountability is a seedbed for fraud.

2.8 Conclusion and knowledge gap in the literature

In this section the researcher tried to summarize the major contributions of significant literatures discussed in the chapter, pointing out major methodological flaws or gaps in them, inconsistencies in theory and findings, and areas or issues pertinent to future study.

The chapter in general describes the major problems confronting the financial institution today is “fraud”, which has sent many of them out of business and is making the industry customers to lose confidence in them since, since they have not been able to curb the ugly event called “fraud”. It takes its roots from the human heart. It is an axiom that the heart is deceitful above all things and is desperately wicked. Fraud is the number one enemy of the business world, no company is immune to it and it is in all works of life. The fear is now widespread that the increasing wave of fraud in the financial institutions in recent years, if not arrested might pose certain threats to stability and the survival of individual financial institution and the performance of the industry as a whole and no area of the economy is immune from fraudsters and even the banking system. Fraud if not checked might cause run on in the banking sector.

In addition, the impact of bank fraud on the operations of banks and indeed the economy at large is of interest to researchers and industry practitioners. Studies concerning bank frauds have highlighted the contribution of frauds to bank distress. For instance, the level of involvement of different category of bank staff in fraudulent activities has been provided by Ovuakporie (1994), Aderibigbe (1999), Kazeem and Ogbu (2002), Onibudo (2007) and Omachonu (2009).

To sum up, what can be learned from review of fraud and its management literatures in the chapter? First, fraud can happen anywhere. Second, fraud is pervasive and continues to grow in terms of losses and perhaps in frequency no one knows how much fraud has gone undetected. Third, fraud management measures employed by financial service sectors are almost inadequate.

Chapter three Methodological design

The preceding chapter has presented the background information of the study, defined the researcher problems, and annotated the findings of relevant literature related to fraudulent acts and its management in commercial banks. The literature review has also revealed that, the empirical evidence appears to be non existence, literature on fraudulent acts control and the practical means to minimize the fraud epidemic, particularly in Ethiopia limited as per the knowledge of the researcher.

The terms related to Methodological Design defined as follows. *Methodology* - the framework associated with a particular set of paradigmatic assumptions that the researcher will use to conduct his or/and her research, i.e. scientific method, ethnography, action research, where as *Methods* – are the techniques researcher will use to collect data, i.e. interviewing, surveying, and participative observation. *Tools (instruments)* – are the devices the researcher will use to collect data, i.e. questionnaires, observation checklists, interview schedules. Then methodological design – is the plan for conducting the study that includes all of the above (O’Leary 2004).

The way in which research is conducted may be conceived of in terms of the research philosophy subscribed to, the research methods (strategy) employed and so the research instruments utilized (and perhaps developed) in pursuit of a goal - the research objective and the quest for solution of a problem. In light of this, the purpose of this chapter is to present the underlying principles of research methodology and the choice of the appropriate research methods, in order to identify means employed in defrauding banks, determine the major characteristics of fraud prevalent in the sector, identify the major incidence of fraud in the banking business, and determine adequacy of fraud detection and prevention systems of the bank.

For this purpose the chapter organized as follows. Section 3.1 presents hypothesis of the study. This followed by the philosophy of quantitative methods (along with discussion of the choice the appropriate methods for the study) approach (3.2).

Then the quantitative research method adopted would be discussed in section 3.3. Finally, the linkage between research hypotheses and items in the specific method of inquiry are presented in section 3.4.

3.1 Hypothesis of the study

As presented in chapter one, the study has a general objective of finding a practical means of minimizing the incidence of fraud in Ethiopia commercial banks. While the specific objectives are:

1. To identify the major incidence of fraud in the banking business.
2. To determine the characteristics banking most fraudulent practice possess.
3. To identify various means employed in defrauding banks and their frequency.
4. To determine adequacy of fraud detection and prevention systems of the bank
5. To suggest measures of reducing the incidence bank fraud.

To achieve these research objectives, the following research questions are developed in the form of hypotheses. In this context, the study focuses on testing the two null (primary) hypotheses in order to address the main research questions of the study. The two hypotheses formulated and will be tested in this study are the following.

Poor salaries and poor conditions of service can cause and encourage fraud. Employees that are poorly paid are often tempted to fraudulent to convert some of the employers' asset to their own use in order to meet their personal and social needs. This temptation is even stronger on bank employees who on daily basis have to deal with cash and near cash instruments.

Ho1: Poor salaries and inadequate working conditions do not induce bank staff to commit fraud

In view of the gravity of fraud in banks, the management of various banks has employed different measures, such as establishment of internal control unit, fraud alerts, security measures etc. Yet fraud has continued in an upward trend, and this has called the effectiveness of these measures into question (Okubena, 1998). Though details may differ from one bank to another, it all depends on size, location and general environment nationally and internationally.

Ho2: Inadequate fraud detection and prevention systems in operation in banks cannot be the cause of frequent fraud in the industry

The discussion in this section has shown the two null hypotheses developed based on the objective of the study. The research problem along with the philosophy of research methodology would guide the choice of the appropriate research method. Depending on the nature of the research problem and the research perspective, a research method could be, based on the philosophy of quantitative or qualitative or a combination of these two approaches of inquiry.

3.2 Quantitative approach of inquiry

A research approach (methodology) refers the procedural rules for the evaluation of research claims and validation of knowledge gathered (Creswell, 2003).

While Sekaran (2003) further clarifies a research approach as academia's established regulatory framework for the collection and evaluation of existing knowledge for the purpose of arriving at, and validating, new knowledge.

Quantitative research is the systematic and scientific investigation of quantitative properties and their relationship. The researcher primarily uses quantitative approach of inquiry for the purpose of developing body of knowledge in the form of generalization that will hold at least to some degree overtime and in context similar to those in which generalization were developed (for broader population) based on findings from the sample selected. It follows a positivist claims for developing knowledge (Creswell, 2003).

With this approach of inquiry the researcher will take an objective position and treat to the phenomena as hard and real through favoring methods of inquiry such as surveys and experiments, and collects research data using preset standardized instruments that can generate relevant statistical data to test the hypotheses or statement with a view to infer patterns of behavior and generalizing findings from samples to population of interest, from the particular to the general, deductively (Fowler, 2001). Therefore, the well designed and implemented quantitative approach of inquiry has the merit of being able to make generalizations, for a broader population based on findings from the sample.

In order to enhance the generalization of findings, it follows standardized procedure in sample selection, instrument design, implementation and analysis. This in turn increases the reliability of procedures as well as the reliability of findings.

Despite the above discussed merits, quantitative approach of inquiry has a limitation of unable to assess human behavior in its entirety as well as going to reduces to the pre determined variables. It has also a problem of not having the property of flexibility in its design, which may be crucial when additional information revealed through data collections needs further, exploration for knowledge. Furthermore, it lacks the ability of interpretative and exploratory examination of research problem (Sarantakos, 2005, cited in Yesgat, 2009). Eventually, the choice among the three research approaches (quantitative, qualitative, and mixed) guided by the research problem apart from the underlying philosophy of each research methods (Mc Kerchar, 2008, cited in Yesgate, 2009). That is the type of data may be numeric information to be gathered on scale of instrument or more textual information, recording and reporting the voice of the participants (Creswell, 2003).

In this study as stated in the previous chapter, the overarching research objective is finding a practical means of minimizing the incidence of fraud in Ethiopia commercial banks. In order to achieve this research objective comprehensively four specific and two null hypotheses were developed at the binging of this chapter. In light of the research objectives and hypotheses formulated and the underlying philosophy of each research approach, the researcher for the current study adopted a quantitative aspect of methodologies and methods, specifically the non experimental type of survey design through selecting the sample unit using the probability sampling method of disproportional stratified random sampling techniques in order to gather quantitative research data by administering the popular survey instrument of questionnaire.

The rationale behind for adopting such a quantitative methodologies and methods is in order to obtain research data that could not be obtained by adopting a qualitative methods approach of inquiry. For instance, a qualitative research design does not produce the research data that allow comparison. The methodological approach does not ensure objectivity as well as has no way assuring that the research fully and correctly captures the true meaning and interpretation of the respondents (Sarantakos, 2005, cited in Yesgat, 2009). The following section, thus, discuss the quantitative aspect of the research method adopted for the current study.

3.3 Quantitative methods of inquiry

In order to get more relevant and sufficient research data regarding the research question and to reach on the objective of the study stated earlier, it is vital to identify appropriate research methods. Accordingly, the quantitative type of research methods adopted to find the practical means of minimizing the incidence of fraud in Ethiopia commercial banks.

Unlike qualitative methods in which the researcher uses non quantification way to interpret the collected data, quantitative methods mean the assessment of the research results is the product of a series of mathematical and statistical calculations and presentation (white, 2003).

Probably the most popular (quantitative) research design in social science is survey design. The survey research design used *“to answer questions that have been raised, to solve problems that have been posed or observed, to assess needs and set goals, to determine whether or not specific objective have been met, to establish baselines against which future comparisons can be made, to analyze trends across time, and generally, to describe what exists, in what amount, and in what context”* (Isaac and Michael, 1997 p.136).

In light of this, for the current study a cross sectional survey research design used for the purpose of bring out research data a one shot basis relevant for identifying the various means employed in defrauding banks, identifying the major incidence of fraud in the banking business, determining the characteristics shared by most banking fraudulent practice, and determining adequacy of fraud detection and prevention systems of the bank , which in turn enable the researcher to find out a practical means of minimizing the incidence of fraud in the commercial banking sector of the country. It is possible to study a wide range of research questions using survey. Because survey research does not set up an artificial situation like an experiment, it is easier to generalize findings to real world settings, as this is where the research takes place. It is also efficient in terms of the researcher being able to gather large amount of data at reasonable low cost and effort compared to other methods like observation.

Furthermore, the use of standardized questions allow for easy comparability between respondents and group of respondents (deference between men and women for example). These and other inherent features of survey research, make it more preferable.

However, it is not far from some limitations, for instance survey research design is quite flexible and can therefore appear in a variety of forms, all are characterized by collection of data using standard questioner forms. But questioner data collecting instrument may not probe for more information in superficial responses, sensitive to low response rate, even self administered (Fowler, 2001).

3.1.1 Sample design

Research designs should be realistic and feasible. In survey research in particular, the temptation is to specify a very extensive research design which attempts to capture the full complexity of the world. Often it will not be possible to collect data on all the variables the researcher might want to include because of different constraints such as financial, time and the researcher may have to settle for sample.

A sample design is a definite plan for obtaining a sample from the sampling frame. It refers to the technique or the procedure the researcher would adopt in selecting some sampling units from which inferences about the population is drawn. Sample and survey instrument design and mode of collecting data are crucial to generate representative statistical data about a population under study. In the case of sample design how well the sample represents depends up on the sample frame, the sample size, and the specific procedures of selecting potential respondents. In respect of sample frame, in a study with the intention of statistically generalizing about population, the sample frame from which potential respondents are to be selected ought to be representative of the population (i.e. the sample frame should be comprehensive enough). Accordingly, in design a sample, basing the sample selection on comprehensive list of potential that have an equal chance of selection is vital to increasing the representativeness of the sample.

For the current study three sets of surveys with a closed ended and open ended type of face to face self administered questioner was conducted. These are managers, accountants, and customer service officers from each private and government owned commercial banks operate in Addis Ababa city administration.

Deriving from the objectives of this study, a questionnaire was designed specifically for the study, and administered to respondents in Addis Ababa City Administration, capital of Ethiopia. The researcher selected this city for two main reasons. In the first place, this is done taking in to account its convenience and accessibility to make a sample from all commercial banks of the country (privately or government owned), with a relatively low cost of resources like time which help the researcher to complete the study within the academic calendar of the Addis Ababa University. Secondly, the sample frame ought to be the list of commercial banks of the country already in operation in the industry. Getting the accessibility of respondents from all of the country banks (both private and government owned) only assumed when the researcher turn his face to the capital city if the country. For instance, respondents for Zemen Bank only found in Addis Ababa City Administration.

The next consideration in sampling design is the sample size, the number of potential respondents to be selected from the sample frame to constitute a sample. The choice of the sample size has a bearing on the reliability of the study. However, it should neither be excessive large nor too small, rather optimum fulfill the requirement of efficiency, representativeness, reliability, and flexibility (Fowler, 2001). This can be attained through taking in to account different factors in deciding on the desired sample size. These factors include the availability of time and resources, homogeneity of the target population, the accuracy required and the objective of the study (Sarantakos, 2005, cited in Yesgat, 2009). Accordingly, and taking the available of resources (like financial and time) in to account as well as the homogeneity of target population, the study selected 111 respondents (managers, accountants and customer service officers consisted 37 each) from private and government owned commercial banks operate in Addis Ababa city administration.

In respect of the specific procedures in selecting potential respondents to enhance the task of identifying various means employed in defrauding banks, determining the major characteristics most fraudulent acts in the bank hold, identifying the factors make bank staffs to commit fraud as well as determining the adequacy of fraud detection and prevention systems of the bank from commercial banks of the country perspective.

To enable all population groups (list of commercial banks in the country) to be represented in the final sample, the country commercial banks population particularly operate in Addis Ababa city administration was stratified in their ownership category. Then, as the main objective of the study was finding the practical means of minimizing the incidence of fraud in commercial banks of the country, to increase the representativeness of the sample of potential respondents (managers, accountants, and customer service officers) were randomly selected from three branches of each commercial banks (except for Zemen Bank) operate in Addis Ababa city administration.

On the merits of stratified random sampling method Saratakos (2005, pp.158-159), cited in Yesgat, 2009, noted that such samples are employed when there is a need to represent all groups of the target population in the sample, and when the researcher a special interest in certain strata. In this sense the method is very economical, and offers a high degree of representativeness. Supporting this Fowler (2001) also noted that some degree of stratification is relatively simple to accomplish and it usually is a desirable feature of a sample design.

The sample selection technique adopted in this regard for the current study was probability sampling, specifically disproportionate stratified sampling. Probability sampling method give every sampling unit an equal chance of being selected because it eliminates the danger of researcher biasing the selection process because of their own opinions or desires. This in turn enables the result of the study to generalize from the sample to the whole of the target population (Frey, et.al, 126).

3.3.2 Survey instrument

In designing survey instrument caution needs to be exercised in preparing instructions and wording of questions to avoid ambiguity and enable the collection of relevant and sufficient data for the study. In line with this, survey instrument (questionnaire for this study) must possess the characteristics of not vague, worded with simple words, short in length, specific (no too specific), unbiased, not hypothetical questions to mention a few. The survey instrument adopted for this study was both closed ended and open ended type of questionnaire.

It is the most important tool in gathering data from a large population in a short time period. It is also preferable for its relative ease for the respondents to fill out within a short period of time (White B, 2003).

Questionnaire in general saves time and money. Instead of interviewing each and every person, a large number of people can fill in the questionnaire at the same time. It also gives the researcher more freedom to choose the way he approaches the target respondents (Saunders, Lewis & Thornhill 2009, 362-366). In the investigation for this study, the questionnaire is handed out to the respondents by hand so the threat of getting low response rate is totally eliminated.

This questionnaire actually facilitates the task of finding on a practical means in minimizing the incidence of fraud in the banking industry of the country. In light of this, the questioner consisted of both closed ended and open ended questions to enhance the capacity of the instrument to collect both quantitative and to allow the respondents to write their opinion without restriction as clearly as they could and to include ideas might not been indicated in the questioner.

The survey instrument of the study, the questioner, in the first place holds the covering letters from the researcher and the department of accounting and finance of Addis Ababa University. The covering latter, particularly from the researcher, stated the purpose of the study, the reason the requesting the data and its application and emphasized the voluntary and confidential nature of the survey. The survey instrument of questioner prepared in the English language, considering the educational status of the potential respondents almost they hold at least their diploma educational qualification (managers, accountants, and customer service officers) and its copy along with the covering letter by the researcher are at the appendix.

The remaining part of the questioner has 3 parts. Part I was intended to gather background information about respondents (general information). In particular, this part elicited information on respondents' gender, age, educational status, current position in the bank, and finally working experience. Then next part of the questioner, part II consisted of questions regarding incidence of fraud acts in the commercial bank of the country. The final part, part III consisted of questions intended to elicited data pertinent to fraud detection and prevention systems, means of defrauding banks and their frequency of occurrence in banks of the country.

Specifically, questions relating to the major means employed during defrauding banks and their degree of occurrences (most often, often, once in a while, undecided and never), and questions regarding the adequacy and effectiveness of fraud detection and prevention systems employed by the bank. Finally, the questioner asked the respondents and provides a space to write if they have any suggestions regarding the study. This may at some extent help the researcher what is good and what is left beyond the study.

3.3.3 Pre survey instrument

After the designing of the survey instrument (questionnaire) took place, and before the actual conduct of managers, accountants and customer service officer of the sample bank branches survey. The questionnaire was given to some selected designated personnel (managers, accountants, and the customer service officer) of sample banks found in Addis Ababa city administration, to the advisor of the researcher, and to the researcher's colleague.

The purpose of doing this, pilot test of questionnaire was to assess the comprehensibility of the survey instrument, to refine and improve the expressions (wording) of questions and to enhance its reliability and validity (Fowler, 2001). Specifically, to make an assessment of the instrument for adequate coverage of relevant dimensions of the study objectives.

Accordingly, the participants of the pilot study were informed about the objectives of the pilot test and how to fill, evaluate and give feed back on the relevance of the contents, length, types of questions, as well as the layout of the questionnaire. However, no comments leading to a significant changes in the questionnaire were obtained, for instance some of them were spelling error, punctuation, etc.

However, In order to test the validity of the questionnaire used for the study, the researcher tested the questionnaire to 16 respondents. These respondents as well as their answers were not part of the actual study process and were only used for testing purposes.

3.3.3 Conduct of survey (administering the questionnaire)

As previously stated, the selection of the respondents was done through disproportional stratified random sampling. First step included selection of commercial banks of the country.

There were 13 commercial banks. Each bank also had several branches (exceptions to Zemen Bank), specifically in the area under study. The second step involved the selection of branches in which the potential respondents (manager, accountants, and customer service officers) where found. The branches were selected randomly from the list 13 commercial banks of the country, disproportionately 3 branches from each 12 private and 1 government owned banks of the country (exceptions to Zemen Bank).

The banks and their respective branches manager, accountant and customer service officer in the study area were selected in order to have a good representation, that is, the researcher was of the opinion that those branches can serve as a reasonable representation of the entire branches as the same operative policies govern every banks and branches national wide.

Every manager, accountant and customer service officer of the randomly selected branch was given the questionnaire by personally visiting them in their work place (branch banks) at the working time convenient to the researcher. However, administering the questionnaire was not found as easy as planned. There are some problems emerged when the researcher disseminating the questionnaire.

For instance, after receiving the cover letter by the department of accounting and finance of Addis Ababa University, the manager at the first place not willing to fill the questionnaire, as well as speak out the accountant and customer service officer were busy at their daily job. Even if this is not the real fact forced not to take a 5 minute to fill the questionnaire, as per the researcher opinion and observation the reason behind for such action was the managers feeling of the bank reputation may affected as a result of filling properly. In addition, the researcher during disseminating the questionnaire to potential respondents (mangers, accountants and customer service officer) of sample branch identified a major frustration features on them as soon as they read and see the term fraud in the questionnaire provided in order to make their response.

Questions were rated on either a two-point (yes/no) scale, on three-point (agree, disagree/ undecided) scale or on five -point scales (most often, often, once in awhile, undecided or never). The questionnaire was administered under the supervision of the researchers. Participants were informed that all responses would be held in strictest confidence, and used only for academic purpose. The instructions defined and clarified terms used in the questionnaires that were specific to fraud and it management in the banking industry.

3.3.4 Data analysis and interpretation technique

The main discussion of this section includes analytical tools employed during the study, analytical techniques adopted for interpreting the survey data as well as outline of the analytical components of fraud and its management in banks of Ethiopia.

Although, it is undeniable that gathering primary evidence takes time, frequently costs more and depends a great deal on the willingness, honesty and ability of the respondents, primary data are superior to secondary ones in a way that they are chosen and collected so that they completely fit the purpose of the research (Ghauri & Gronhaug 2010, 99-100).

This study made use of descriptive frequency statistics to look at fraud and management of it in both private and government owned commercial banks of the country. Descriptive statistics was used to describe patterns and general trends in the survey, mostly in to form of simple frequency, and percentages presentation.

The first task ahead of the researcher was to compile the questionnaire data and transform it in the meaning full representation that can be interpreted and analyzed. As a result of the analysis, observations are made leading the researcher to form interpretations and draw conclusion. Frequencies and percentages figures of data were computed using the Statistical Package for Social Science (SPSS) software. In light of this, appropriate frequency and percentage figures were used to interpret and present the data.as required. Tables were also used as appropriate to clearly show the analysis and findings.

Therefore, in this study, the analysis of total responses from the completed questionnaires for each item was based on simple descriptive analysis of frequency distribution of relevant statistical information supplemented by percentage. This is because of its simplicity and relevance to our data. It is noted that a simple frequency distribution tables of types and number of responses translated into percentages were constructed and analyzed. The literatures to support the findings were also integrated.

3.4 The relation between research hypothesis and research design

This has presented the study hypotheses and the methods approach appropriate to the study in addressing the research objectives and hypothesis formulated in the study. The current study has set two null hypotheses. These are;

Ho1: Poor salaries and inadequate working conditions do not induce bank staffs to commit fraud

The issues / variables the study investigated based on this null hypotheses were poor salaries, poor working conditions, and causes of fraud. The items in the survey instrument (questionnaire) which were enable the researcher to investigate the above variables of the first null hypotheses were survey questions 2 and 3 at part II of the questionnaire distributed to management, accountant and customer service officer at sample branch banks. The next hypothesis set in the study and was tested;

Ho2: Inadequate fraud detection and prevention system in bank operations cannot be the cause of frequent fraud in the industry.

The variables in the hypotheses Ho2 investigated were effectiveness of fraud detection systems, effectiveness of fraud prevention systems of the banks, causes of fraud in banks, frequency of frauds committed in banks. These variables of the hypotheses investigated through the items in the survey questions of 1, 2, 3, 4, and 5 at part III of the survey questionnaire.

In conclusion, based on the overarching research problems stated in the preceding chapters, two null research hypotheses have been formulated. With respect to the research methodology the principles of research methods approach have been shown. Based on the underlying principles of research methods and the research problems quantitative research approach has been chosen as appropriate to this research.

Chapter four Data analysis, presentation and interpretation

The preceding chapter has presented the research hypotheses, the appropriate research methods approach adopted and the rationale behind for conducting the study using quantitative methods approach. When conducting the study the researcher used descriptive method of research. This kind of research method is a study about findings facts that can help the researcher to prove that information gather are reliable and accurate. Since the present study is all about the finding of the practical remedies to minimize the incidences of fraud in Ethiopia private and government owned commercial banks, the suitable methods the researcher believes with among others was the descriptive method. In connection to this the researcher believes that using this kind of method of research would further help the researcher to understand about the topic.

In this study, the analysis of the data gathered through survey was based on simple descriptive analysis of frequency distribution of relevant statistical information supplemented by percentage. This is because of its simplicity and relevance to the data obtained through questionnaire administration. It is noted that a simple frequency distribution tables of types and number of responses translated into percentages were constructed and analyzed. Probably the most common method in survey study is the use of the pencil - and - paper questionnaire.

As discussed in the preceding chapter, research methodologies and design, the main advantage of this method of survey research is its familiarity to respondents, especially in developing country, the fact that it allows respondents to complete the questionnaire at their own convenience, the fact that it allows them some time to think about their answers. The disadvantages are often low response rates, time consuming follow up and data entry.

In light of this, this chapter was designed to enable the researcher in identifying the prominent causes of fraud in banks of Ethiopia, in determining means employed when defrauding banks and their frequency of particular fraudulent acts as well as in determining the main characteristics of fraudulent acts in the banking sector hold. These in turn provide the opportunity to find the means of minimizing the incidence of fraud in the banking business of the country. As a result, the chapter deals with the presentation of the data collected from the survey questionnaire, the analysis of data obtained for the purpose of this study and presentation of the findings and observations made thereof. To this end, the chapter focuses on presenting the data obtained into the table, analyzed the presented data and finally comes out with a reasonable realistic hypothesis of the research conducted.

The major sources of data collected was from primary sources, (the use of questionnaire administered) to the selected manager, accountant and customer service officer at sample branch banks of private and government owned commercial banks of the country currently in the banking business in Addis Ababa city administration.

However, at this point, the questionnaire completion dead line has been met and the researcher had all of the respondents' data. Now the researcher comes to the assignment of pulling data together to make observation, conduct analysis, make interpretation and finally draw conclusion. In order to achieve the objective of the study the questionnaire items were analyzed individually to give credence for the research.

Accordingly, the remaining part of the chapter organized as follows. Section 4.1 presents the respondents details. Then section 4.2 and section 4.3 constituted major incidences of fraud and the main characteristics of fraudulent acts committed in the banking sector of the country respectively. The next section 4.4 presents the most prominent means employed in defrauding banking business and their frequency of occurrences. Finally, conclusions for the chapter presented in section 4.5.

4.1 Analysis of the questionnaire distribution

Sekaran (2003) defines the population as “the entire group of people, events, or things of interest that the researcher wishes to investigate”. The population for the current study was obtained from list of commercial banks of Ethiopia; the study unit selected for the present study consisted of managers, accountants and customer service officer of sample branch commercial banks at Addis Ababa city administration.

The selection of the respondents was done through disproportionate stratified random sampling. First step included selection of banks. There were 12 private owned and 1 state owned commercial banks in the country, especially all of them found only in the study area, Addis Ababa city administration. Each bank had several branches in the area under study. Second step involved the selection of branches.

From the list of 13 banks 37 branch banks were selected randomly, 3 branches from each, exception to Zemen Bank. Every participant of the study, managers, accountants, and customer service officers at selected branch was given the questionnaire by personally visiting them in bank. Thus, questions or concepts in the questionnaire not clearly understood were clarified on the spot.

In order to test the validity of the questionnaire used for the study, the researcher tested the questionnaire to some selected respondents. These respondents as well as their answers were not part of the actual study process and were only used for testing purposes. The pilot test involved that 20 questionnaires were distributed to respondents, to some designated personnel of selected branch banks, researcher's classmates, and to the advisor, but only 16 (80 %) were retrieved.

After making some corrections, like punctuation marks, spelling errors, in the month of April 2011, and 111 copies of a questionnaire specifically designed for this study were distributed to the managers, accountants and customer service officer of 37 branch banks located in Addis Ababa City administration. The researcher visited each banks in order to give out copies of the questionnaire to every bank manager, accountant, and customer service officer met on their seats and in order to retrieving the completed questionnaires. At the end, out of all the participants (111) who were given the questionnaire, only a total of 86 participants were completed the survey questionnaire and retrieved. These giving the researcher a response rate of 77 percent.

The table below summarizes these facts.

Table 1 Preliminary study of questionnaire and its distribution

Respondents	TQD	R	NR	R (%)	NR (%)
Classmates, researcher advisor, some designated personnel from banks	20	16	4	80	20
Managers, Accountants, and Customer service officer	111	86	25	77	23

Where *TQD: Total questionnaire distributed; R: Retrieved; and NR: Not retrieved*

Source: Researcher field work, 2011

As can be seen in the above table1, the response rate for the questionnaire survey was 80%, where only 16 out of 20 questionnaires were received back after, while the response rate for the actual questionnaire administration were 77% , where only 86 out of 111 questionnaires were retrieved. For the analysis, the researcher makes use of the number of questionnaires returned which is 86. Even if, the current study possessed the response rate above average as a result of the survey were self administered, the non response rate would not matter if the researcher could be certain that those that do not respond were very similar to respondents on all relevant variables and therefore would have answered the survey similar if they had taken part. However, this was by no means certain; in many cases the researcher can be sure.

4.2 Respondents' profile

For the profile of the respondents, the questionnaire asked for the participants' gender, age, their current job position, their educational status and duration of service in the bank. The table below summarizes the gathered values for each respondents profile category.

As depicted in the table 2 below, the survey was completed by 86 respondents of whom 31.4 percent were less than 30 years old, 61.6 percent were between the ages of 30 to 45 years old, while the remaining 7.0 percent were in the range of above 45 years old. It was noticed that the respondents predominantly (68 percent) were male, while the female participants consisted only 31.4 percent of the total respondents.

Table 2 The distribution of the respondents according to their profile category.

Item	Responses				
	Gender		Male	Female	Total
		68.6 % (59)	31.4% (27)	100% (86)	
Age	Less than 30 years	31 to 45 years	More than 45 years	Total	
	31.4 % (27)	61.6 % (53)	7.0% (6)	100% (86)	
Current job position	Manager	Accountant	Customer service officer	Total	
	25.6% (22)	32.5% (28)	41.9% (36)	100% (86)	
Educational status	Diploma	Bachelor	Masters	PhD and above	Total
	25.6% (22)	60.5% (52)	10.5% (9)	3.5% (3)	100% (86)
Work experience	Less than 5 years	5 to 15 years	Greater than 15 years	Total	
	43.0% (37)	48.8% (42)	8.1% (7)	100% (86)	

Source: Researcher field work, 2011

In addition, a majority of the response (41.9 percent were) came from Customer service officer category of respondents. Accountants and Managers category of respondents constituted only 32.5 percent and 25.6 percent of response rate respectively from the total (100 percent) response rate of the survey. While analyzing the educational status respondents, it was identified that the highest percentage 65.5 percent were respondents with bachelor degree, and the lowest educational profile category of respondents were diploma which comprised a percentage of 25.6 percent.

The remaining 14 percent of respondents held a masters and PhD degree level of educational qualification. To this end the numbers of year's respondents of the study held in the banking business were: less than 5 years (43.0 percent), 5 to 15 years (48.8 percent), and more than 15 years working experience comprised 8.1 percent of the total respondents.

To sum up, table 2 in the above, indicates that all the respondents have a minimum educational qualification of diploma degree (25.6 percent) or bachelor degree of 60.5 percent or 14 percent masters and above. The respondents also fell within the age bracket of 31 to 45 years old have a frequency of 53 and percentage of 61.6 percent. The table also shows that from the total respondents, those held a working experience range from 5 to 15 years contribute the majority (48.5 percent) of the total response rate.

As a result of these wide distributions of respondents, those have a high level of educational qualification, a matured age bracket, and prominent working experience in the sector; they might have adequate or reasonable knowledge of fraud and its management in the banking industry. Hence, they might possess the capability to provide richer insights in to the issues investigated in the study. This in turn might be also the fate for the banking industry since respondents well experienced and educated means easily identify the loopholes in the operational system of the sector which provide the opportunity for fraud acts.

Supporting this idea, the study undertaken by Nabhan (2009) indicate that, there is a relationship between age, working experience and educational level and familiarity with internal control system, reporting fraud, receiving a awareness sessions about fraud, the availability of written policy and procedures, types of fraud, departments were fraud frequently occurs, effective procedures in discovering fraud, types of controls and how to deal with fraud.

4.3 Factors make bank staffs to engage on fraudulent acts

Under this section the issue of concern was why some one would commit a fraud. As previously discussed in chapter two of the study factors derived from the extant literature were presented as basic motivators towards engaging in banking fraudulent practices.

Table 3 Response on occurrence of fraudulent act and attempts

Item	Responses		
	Yes	No	Total
Are there any fraudulent acts happened in the bank (you working in) as per your knowledge?	100% (86)	0.0% (0)	100% (86)

Source: Researcher field work, 2011

As can be seen from the tables 3 above, the total (86) of responses were recorded to the question asked “Are there any fraudulent banking practice happened as per your knowledge”, representing 100 percent of the total response gathered.

In view of this question above, 100 percent of the total population samples affirmed that their banking organization have faced the fate of fraudulent banking practice even if its type, magnitude, and frequency differ from one bank to an other or one branch to another branch of the same bank. From these responses presented in table 3 above, the researcher concluded that no area of the economy is immune from fraudsters especially the banking sector and it is in all works of life. It widespread increasingly in the financial institutions, if not arrested might pose certain threats to stability and the survival of individual financial institution and the performance of the industry as a whole.

As can be seen in table 4 below, on the question about the factors make bank staffs to engage in banking fraudulent practices, the respondents (80.2 percent) felt the polices and procedures of their banking organization was ineffective and the respondents constituted 19.8 percent from the total respondents (100 percent) felt the written polices and procedures of the bank working in were effective.

From the total respondents, 81.4 percent saw the supervision activities as inadequate for the question the supervision activities performed in the bank currently working in were able to close the opportunity to committee fraud by staffs, while 18.6 percent were not agree with the inadequacy of supervision activities of the bank. With respect to whether the working conditions of the bank make staffs to engage on fraudulent act or not, 67.4 percent of the respondents held the view that the working conditions of their organization was in adequate, where as the remaining 32.6 percent were disagree with the above view.

Regarding the job rotation activities performed in the bank, 60.5 percent were uncertain about job rotation activities in the bank currently working and its role in preventing fraudulent acts and attempts and the remaining 39.5 percent from the total respondents (100 percent) were certain about a bout this view. Still when 75.5 percent of respondents indicated that the fraudulent act committed in banks would be a result of the remuneration staffs earned was inadequate to satisfy even basic needs, 24.4 percent from the total respondents were not.

Furthermore, when the respondents asked about the extent to which internal systems of the bank was adequate in order to determine whether or not the internal control system and procedures provide some loopholes to fraud epidemic in the banking sector, 80.2 percent of them declared as they were uncertain about the adequacy of internal control systems of the bank and the capacity to prevent some loopholes opportunity to fraud acts. Based on the information given by the participants and summarized in the table 4 below, among the factors hypothesized to encourage bank employee involvement in fraud the respondents of gave their view of the major causes of fraud in their organization as; (a) in effective polices and procedures, (b) inadequate supervision activities, (c) in adequate working conditions, (d) staffs stay longer on a single job position, (e) poor salaries and motivational packages, and finally (f) inadequate internal control system.

Table 4 Factors make staffs to commit fraudulent acts in the bank current working in

Item	Responses		
	Yes	No	Total
In effective policies and procedures	80.2% (69)	19.8% (17)	100% (86)
Inadequate supervision activity	81.4% (70)	18.6% (16)	100% (86)
In adequate working conditions	67.4% (58)	32.6 % (28)	100% (86)
Staffs staying longer on a particular position	60.5% (52)	39.5% (34)	100% (86)
Staffs feeling frustrated due to poor salaries	75.6% (65)	24.4% (21)	100% (86)
Inadequate internal control systems	80.2% (69)	19.8% (17)	100% (86)

Source: Researcher field work, 2011

The analysis in determination of factors which encourage bank staffs to commit fraud, revealed that above 50 percent of respondents of the survey agreed on poor salaries and inadequate working conditions can induce bank staffs to commit fraudulent acts and attempts. This leads to the researcher to do not accept the null hypothesis (Ho1) which stated that poor salaries and inadequate working conditions do not induce bank staffs to commit fraud.

This implies that if a man earns so little he is likely to commit fraud in order to meet his ever increasing needs. Thus poor salaries and inadequate working conditions can be an inducement to commit fraud.

In general, as described in the literature review chapter of the study, there is no single reason behind fraud and any explanation of it needs to take account of various factors and a common model that brings together a number of factors to commit fraud is the Fraud Triangle, which built on the premise that fraud is likely to result from a combination of three factors: motivation, opportunity and rationalization.

4.4 Characteristics of banking fraudulent practice

The purpose of this section was to summarize result of respondents regarding the major characteristics prevalent on fraudulent practice in the banking sector. Accordingly, for the questions respondents of the survey asked to characterize the fraudulent acts committed in their banking organization, the gathered information, as depicted by table 5 below presented that most of the respondents agreed on the characteristics of fraud the researcher provided for them in the survey instrument.

For instance, as shown in the table (5), to the question whether or not the fraudulent acts in their banking organization characterized by frauds high in value but not frequently committed, when 68.6 percent of the total respondents answered yes, 31.4 percent were answered as no. Where as frauds small in value but frequently committed for along time, and when 79.1 percent of response assured, the remaining 20.9 percent were not agreed on it. On the other hand, 83.7 percent of the respondents affirmed that fraudulent acts committed in their organization characterized by frauds against the bank, the banks is the victim, 16.3 percent of the total respondents not satisfied with this option.

For the banking fraudulent practice characterized by frauds committed against customers, clients are the victim, 65.5 and 34.5 percent of the total respondents (100 percent) were answered as yes and no respectively. In addition, when 77.9 percent of the total respondents (100 percent) agreed on frauds committed in their organization characterized by frauds committed by bank employees, 22.1 percent revealed that it is not true for their banking fraudulent practice.

Table 5 The major characteristics banking fraudulent practice share

Item	Responses		
	Yes	No	Total
Frauds high in value, but not frequently committed	68.6% (59)	31.4% (27)	100% (86)
Frauds small in value, but frequently committed	79.1% (68)	20.9% (18)	100%
(86)			
Frauds against the bank, bank is the victim	83.7% (72)	16.3% (14)	100% (86)
Frauds against outsiders, customers are the victim	65.1% (56)	34.9% (30)	100% (86)
Frauds committed by bank employees	77.9% (67)	22.1% (19)	100% (86)
Frauds committed by managers	79.1% (68)	20.9% (18)	100% (86)
Frauds committed by bank staffs in collusion with outsiders	88.4% (76)	11.6% (10)	100% (86)
Frauds committed by outsiders/robbers	36.0% (31)	64.0% (55)	100% (86)

Source: Researcher field work, 2011

Furthermore, from the total respondents 79.1 percent held the view the fraudulent practice prevalent in the bank currently working in were frauds committed by managers, 20.9 percent were stand against this fact.

As observed from the table 5 above the respondents constituted 88.4 percent described frauds mostly committed in their banking organization were frauds committed by staffs in collusion with outsiders, 11.6 percent held the view frauds were committed by other than managers.

Therefore, from this survey result it is possible to conclude that most of the fraudulent practices prevalent in the banking sector of the country, especially in banks currently in operation at Addis Ababa City Administration were frauds both high and small in value, frauds made a great effect on both banks and its customer, frauds committed by both bank managers and employees, and frauds committed by bank staffs in collaboration with outsiders.

4.5 Fraud detection and prevention system

As stated in the review literature part of the study, fraud is an “invisible” crime which makes it difficult to detect. It is not like the theft where by the victim will notice his pursue missing. The offender is an educated well informed individual who well knows how to cover his/or her tracks and override the system. The demographic characteristics of respondents in the study also support this postulation of literature review.

This section tried to make an analysis of information gathered concerned fraud detection and prevention of systems employed by the banking sector of the country to the extent they are adequate and effective in the task of detection and prevention of fraud epidemic in banks.

The analysis also made to determine there is a direct relation ship between inadequacy of fraud detection and prevention systems and frequent occurrence of fraudulent acts in the sector. The table (6) below summarizes the survey results concerned fraud prevention and detection systems of the bank.

Table 6 Fraud detection and prevention systems employed by banks

Item	Responses			
Are the fraud detection systems of the bank adequate and effective in preventing fraudulent acts?	Agree 2.3% (2)	Disagree 97.7% (84)	Undecided 0.0% (0)	Total 100% (86)
If fraud detection system of the bank inadequate can be the cause of frequent fraudulent acts?	Agree 54.7% (47)	Disagree 20.9% (18)	Undecided 24.4% (21)	Total 100% (86)
Are the fraud prevention systems of the bank effective and capable of reducing occurrence of frauds?	Agree 1.2% (1)	Disagree 98.8% (85)	Undecided 0.0% (0)	Total 100% (86)
If fraud prevention systems in banks inadequate, can have a direct link with frequent fraudulent acts?	Agree 86.0 % (74)	Disagree 11.6 % (10)	Undecided 2.3% (2)	Total 100% (86)

Source: Researcher field work, 2011

Accordingly, as shown in table 6 above, the entire respondents (97.7 percent) confess that the fraud detection systems and procedures, like checking of cashiers, balancing of accounts at branches, of their banking organization were inadequate and ineffective in preventing fraud. Similarly, when the respondents asked about the adequacy and effectiveness of fraud prevention and systems, like verification of signatures, segregation of duties, close circuit televisions, 98.8 percent of the total respondents put their adequacy and effectiveness in doubt.

Regarding the determination of the extent to which there is a direct relation between inadequacy of systems employed by banks in order to detect and prevent banking fraudulent practice and the occurrence of frequent fraudulent practice, the majority of respondents agreed that inadequate fraud detection and prevention systems in banks operation have a direct link with the rate and frequency of fraudulent activities in their banking organization.

In general this shows, a proper system is not developed to abreast the various fraudulent practices that perpetrated in banks every now and then. This goes to confirm that inadequate fraud detection and prevention systems in operation in banks can be the cause of frequent fraud in the industry. Therefore, this made it imperative for the researcher to not accept the null hypothesis (Ho2) and consequently accept the alternative hypothesis that stated inadequate fraud detection and prevention systems in operations in banks of Ethiopia can be the incidence of frequent fraudulent acts in the industry.

The implication of this is that, the more the fraud detection devices, all things being equal, the less the rate of fraud in the banking industry of the country. This also proves the study undertaken by Ekechi (1990), which states that the task of fighting fraud has become an escalating war. Even those firms with the most advanced tools and processes to detect and prevent fraud feel that they are falling behind. Technical advancement and globalization of fraud will continue to provide new challenges to a firm's ability to manage.

The next section of the chapter (4.6) will devoted to identifying and discussing various fraud schemes as prominent in Ethiopia banking business as well as their frequency of occurrence.

4.6 Methods employed in defrauding banks and their frequency of occurrences

In chapter two of the study the researcher tried to present those major means employed in defrauding banks after go through the relevant literatures available, including some fraud cases obtained from Federal Ethics and Anti- corruption Commission of the country. At this point the researcher tried to analyze the information gathered from respondents of the survey concerning the issue of which means employed by fraudsters in committing frauds and their degree of frequency.

This in turn enable the researcher in determination of the major methods employed in defrauding banks and there by to make recommendations to the concerned party. In this regard the researcher attempted to assess the issues as follows.

As discussed in the above section, the systems and procedures employed by banks when engage in fraud detection and prevention were inadequate and in effective to achieve the objective for which they were sated. In addition to this, the technical advancement and globalization of fraud continue to provide new challenges to a firm's ability to manage fraud. In light of this, this section will tried to make some discussion of methods employed by fraudsters in committing fraud and their frequency of occurrence in order to identify the most prevalent methods of defrauding banks in the country. The researcher believed that making this will help the fraud manager in the respective banks to establish updated fraud detection and prevention systems and procedures based on the methods of defrauding banks currently prevalent in the industry. The table below present the information gathered through survey for the purpose of identifying the most prevalent methods of defrauding banks in the country.

As shown in table 7 below, a list of 9 selected major methods employed in defrauding banks isolated from the extant literature were presented in the questioner as methods in which fraud can perpetrated and currently prevalent in the banking industry of the country. These are; frauds committed through creating forged checks, ATM fraud, fraud through account opening, frauds related to money transfer, frauds committed through of employment application, computer fraud, theft and, personal use of goods of goods, frauds through diversion of balances of others for personal interest, and other possibilities.

Accordingly, as shown in table 7 below, respondents were asked to rank (most often, often, once in a while, undecided, and never) the methods employed in defrauding banks listed in the above paragraph according to their frequency of occurrence in their banking organization currently working in. The survey administered results a variety of responses obtained towards which methods employed in defrauding banks occurs most frequently in the banking sector. Frauds committed through creating forged checks, when 53.5 percent of the total respondents ranked as it occur most often, 41.1 percent rank as often occurred. This indicates that the entire respondents (95 percent) agree with the fact the fraudulent practices prevalent in the sector were related to creating forged checks. Regarding the question how often ATM fraud occurs, respondents constituted above 60 percent answered it was never occurred in the bank currently working in as per their knowledge. Based on this, it might be concluded that frauds related to the Automatic Teller Machine was not prevalent in the sector due to its recent existence in the banking industry and its few in number around the country.

With respect to frauds committed through opening new account and money transfer, above 50 percent from the total respondents agreed that frauds often committed were through opening new account and related to money transfer activities of the banking industry.

In addition, frauds prevalent in the banking sector of the country were frauds perpetrated through employment application, computer fraud, theft and personal use of goods, averagely above 50 percent of the total respondents (100 percent) proved this facts. Frauds made through diverting account balance of client for private interest also the usual fraudulent acts familiar to the banking industry of the country.

Table 7 Methods employed in defrauding banks and their frequency of occurrence

Item	Responses					Total
	Most often	Often	Once in a while	Undecided	Never	
Creating forged check	53.5% (46)	41.9% (36)	1.2% (1)	3.5% (3)	0.0% (0)	100% (86)
ATM frauds	0.0% (0)	2.3% (2)	20.9% (18)	14.0% (12)	62.8% (54)	100% (86)
Account opening fraud	14.0% (12)	57.0% (49)	24.4% (21)	1.2% (1)	3.5% (3)	100% (86)
Money transfer fraud	14.0% (12)	57.0% (49)	22.1% (19)	4.7% (4)	2.3% (2)	100% (86)
Employment application frauds	20.9% (18)	43.0% (37)	18.6% (16)	9.3% (8)	8.1% (7)	100% (86)
Computer fraud	10.5%(9)	60.5% (52)	22.1% (19)	3.5% (3)	3.5% (3)	100%(86)
Theft of goods	34.9% (30)	43.0% (37)	15.1% (13)	4.7% (4)	2.3% (2)	100% (86)
Fund diversion	7.0% (6)	53.5% (46)	26.7% (23)	10.5% (9)	2.3% (2)	100% (86)
Personal use of goods	31.4% (27)	57.0% (49)	11.6% (10)	0.0% (0)	0.0% (0)	100% (86)
Others	0.0% (0)	10.5% (9)	24.4% (21)	0.0% (0)	65.1% (56)	100% (86)

Source: Researcher field work, 2011

Finally, from the analysis of data summarized in table 7 above, the fraudulent practice prevalent in the sector were frauds committed through; creating forged checks, new account opening, money transfer, employment application, computer fraud, theft and, personal use of goods of goods, and frauds through diversion of balances of others for personal interest. The review of literature available at Federal Ethics and Anti corruption Commission also this result of survey.

4.7 Conclusions

As stated in the previous chapter, the research objectives of this study were to find a practical means to minimize the incidence of fraud in the commercial bank (both private and government owned) of the country, through administering questionnaire for managers, accountants, and customer service officers at sample branch banks operate at Addis Ababa City Administration.

In general, the discussion in this chapter endeavored to integrate the results of the survey method so as to address the general objectives of the study holistically. Then from the analysis of the questionnaire administered, it can be deduced following concepts.

In respect of the major causes of fraud in the banking sector of the country, the study found that ineffective policies and procedures, inadequate supervision of activity in bank operations, in adequate working conditions, lack of employees job rotation, poor salaries and lack of adequate internal control system establishment as a prominent incidence of banking fraudulent practice.

With respect to the problems related to fraud detection and prevention systems and procedures the study highlighted some concerns. For instance, the study found that the fraud detection and prevention systems lack adequacy and effectiveness. Inadequacy of control systems of fraud, detection and prevention systems, result as an incidence to frequently occurrence of fraud in the sector was also apparent from the analysis of results.

In respect of identifying the prominent means employed in defrauding banks and their frequency of occurrence, the study revealed that the major methods employed in perpetrating fraud. This include creating forged checks, theft of goods, personal use of bank assets, money transfer fraud, computer fraud, employments application fraud, account opening fraud, and fund diversion.

Chapter five Conclusions

This study aimed to find a practical means to minimize the incidence of fraud in Ethiopia private and government owned commercial banks. The purpose of this chapter of the study, which was the last chapter, was to review the whole study and highlight some recommendations based on the conclusion reached on. Accordingly, section one presents an overview of the study and its major findings (conclusion). The chapter also contains a couple of recommendations aimed at improving the bank's fraud management systems, such as fraud detection and prevention systems ought to be implemented to mitigate the problem. Thus, the study implications (recommendations) to the Ethiopian private and government owned commercial banks, particularly operate in the study area was presented in the final section, section two.

5.1 Summary of the study

This section provides a concluding statement about the whole study, fraud and its management in both private and government owned commercial banks of Ethiopia. The conclusions were supported by a summary of the results from the analysis of data gathered through survey administration. The data gathered were concerned on the incidences of fraud problem prevalent in the banking sector, the characteristics the fraudulent practice in the sector posses, fraud detection and prevention systems of banks, and means employed in defrauding banks and their frequency of occurrence. These all make a base for the researcher in suggesting practical remedies for minimizing the incidence of fraud in the banking business of the country.

The current study began its discussion with an elaboration of the prevalent problem of fraudulent practice in the sector and its controlling system. The study in its first chapter made presentations of a brief overview of Ethiopian banking system, theoretical foundation of the study, statement of research problem, formulated objectives of the study, the research methodologies adopted and employed during the study, the scope and limitation and also the contributions might provided by the study.

The study also made a review of the relevant issues of fraud and its control systems and procedures. The review in the first place highlighted the types of fraudulent activities committed in banks. There are many different types of fraud and classifications made by different scholars in terms either various criteria or with a criterion comfortable for their intended purpose.

However, for this study the researcher used the general classification of fraudulent activities discussed by Idowu (2009). Accordingly, he classified frauds committed in banks into three, that is: by flow, by victims and by act. To this end, instead of worrying about every conceivable kind of fraud under the sun, fraud managers had better to begin by concentrating on the types of fraud most likely to occur in their industry and at their company, and they tailor their fraud management efforts to focus on the levels within the company where fraudulent activities can inflict the most damage.

Further, in the literature review it was indicated that related to the methods by which fraud can be perpetrated in banks, today's fraud-threat agents are much more sophisticated, as are their fraud schemes. They are also more global, and the successfully perpetrated frauds often provide higher rewards than ever before, thanks to modern technology such as the cheap use of the Internet.

One must be ever-alert for new fraud schemes and learn the lessons of others who have fallen victim to the fraud schemes of old, as well as those of today. One thing about fraud schemes, as the old adage states: “Where there is a will, there is a way”! It is often amazing how ingenious defrauders are at coming up with new fraud schemes. Thus, the fraud management systems and procedures of banks should take in to account as people can be quite inventive once they have crossed that line and decided to cheat. In connection to this, the literature review also presents some of the current banking fraudulent practices committed in banks of Ethiopia obtained from Ethiopian Federal Ethics and Anti-corruption Commission available documents.

With respect to causes of fraud in banks (why is fraud committed?), the study tried to point out that there is no single reason behind fraud and any explanation of it needs to take account of various factors and a common model that brings together a number of factors to commit fraud is the fraud triangle, which built on the premise that fraud is likely to result from a combination of three factors: motivation, opportunity and rationalization. Therefore, what fraud management party does know is that financial institutions of all kinds are constant targets of fraud perpetrators from inside and outside and that management must devote substantial financial, human, and technological resources to detection, prevention, and deterrence of frauds of all types and origins.

In addition to the above points, the review also provides the important points concerning the effect of fraud on bank victim, regardless of the way and the reason why the individual perpetrates the fraud from the organization, the end result is usually the same, impact the organization financially, operationally, and psychologically. It is the most fatal of all the risks confronting banks.

Eventually, concerning measures can be implemented to mitigate the growing trend of fraud disaster, particularly in the banking sector, the review of literature also revealed that after understanding fraud as a real problem, threatening virtually every organization and social program that exists, it is time to start looking at what has been done in response to the growing size and frequency of fraud schemes, as well as identifying practical approaches that can be implemented to prevent future fraud occurrences. In connection to this, management of various banks has employed different measures, such as establishment of internal control unit, fraud alerts, security measures etc. Yet fraud has continued in an upward trend, and this has called the effectiveness of these measures into question.

It was discussed that depending on the nature of the research problem, the research perspective and the research constraints (financial and time), a research method could be based on quantitative methods approaches. Examination of the literature on research methods showed that a quantitative research tests hypothesis using sample data with the intention of statistically generalizing for the population under investigation. This research approach employs inquiry strategies such as survey and experiments.

As it was discussed in research design part of the study, this quantitative research methods approach is not without weaknesses. The weakness of a quantitative research design include the difficulty of standardizing the research process, failure to assess human behavior in its entirety, and lacks flexibility, like due to standardization of the process, in design which may be crucial when additional information revealed through data collection need further exploration for knowledge.

In a general sense, it was indicated that a properly designed and implemented quantitative research has the advantage of being able to make generalizations, for a broader population, based on research results from the sample.

Considering the underlying philosophy of each research approach and the research problems in the study, the quantitative research methods approach adopted and implemented. The survey was administered to managers, accountants, and customer service officer at randomly selected 37 banks branches (3 branches from each private and government owned commercial banks of the country, exception to Zemen Bank) operate in Addis Ababa City Administration and a response rate of 77 percent was obtained.

The survey instrument (questionnaire) contained questions dealing with the prominent factors induce bank staffs to commit fraud, the major characteristics of fraud banking fraudulent practice might posses in the sector, adequacy of fraud detection and prevention systems employed by banks, and the prevalent means employed in defrauding banks and their frequency of occurrence in the sector.

The major findings of the study resulted from analysis, presentation, and interpretation of research data obtained through survey administration reflect the following. With regard to the incidence of banking fraudulent practice prevalent in the banking industry of the country, it was indicated that ineffective policies and procedures, inadequate supervision of activity in bank operations, in adequate working conditions, lack of employee's job rotation, poor salaries and lack of adequate internal control system establishment considered as a prominent incidence of banking fraudulent practice.

Another issue identified in the study pertained to the major characteristics banking fraudulent practice share in the industry. The survey respondents indicated that there were different characteristics frauds prevalent in the banking sector of the country share. These are frauds has a characteristics of high in value/amount but not frequently committed, frauds small in value but frequently committed for a long period of time, frauds against the bank, frauds against outsiders/customers, frauds committed by bank employees, frauds committed by managers, frauds committed by outsiders/robbers, and the frauds committed by outsiders in collusion with bank staffs. Furthermore, with respect to the problems related to fraud detection and prevention systems and procedures the study highlighted some concerns. For instance, the study found that the fraud detection and prevention systems lack adequacy and effectiveness. Inadequacy of control systems of fraud, detection and prevention systems, result as an incidence to frequently occurrence of fraud in the sector was also apparent from the analysis of results.

With regard to identifying the prominent means employed in defrauding banks and their frequency of occurrence. The study revealed that the major methods employed in perpetrating fraud and occurred most frequently in the banking industry of the country include; creating forged checks, theft of goods, personal use of bank assets, money transfer fraud, computer fraud, employments application fraud, account opening fraud, and fund diversion.

To conclude, in view of the foregoing discussion of previous studies of bank fraud, research methodology planed, ways of data analysis and interpretation, it can be observed that fraud had and is still having very far reaching repercussions on the banking sector and that now is the time to device a practical ways and means from the effective investigation of fraud and its management in the banking sector of Ethiopia.

As a result, the researcher is full of hope in undertaking the study as it contributes a great significance in the way of curbing the fraud problem in Ethiopia commercial banks, which in turn assure the real implementation of the five year transformation and development plan of the country government.

5.2 Recommendations

In recent times, the rate and frequency at which frauds occur have been a cause of great concern to banking organizations in Ethiopia. It was noted that fraud affects the banks mostly and can erode the assets and images of banks if it is not controlled or minimized. Therefore, frauds in the banking sector have become a phenomenon which needs a drastic resolution so as not to cripple that sector of the economy. In this context and based on the analysis of data obtained through survey in the preceding chapter, the following measures were suggested in order to control and minimize fraud occurrence in banking industry of Ethiopia, particularly banks operate in Addis Ababa City Administration.

The knowledge of the possible causes of a disease will assist a medical doctor to give adequate prescription and panacea, for the prevention and cure of the disease. Similarly, it was discovered from the data collected that the major incidence of banking fraudulent practices committed in banking industry of the country were ineffective written policies and procedures in the bank, inadequate supervision of bank operations in a daily bases, in adequate working conditions, poor salaries of employees, inadequate job rotation of employees, and inadequate internal control systems and procedures employed by banks.

Therefore, there is need for the players in the industry to set up and implement an effective and efficient internal control system that will adequately monitor the daily activities of the industry without leaving any loophole, appropriate personnel policies and practices as well as a good salary structure and excellent working conditions which can help to a great extent to reduce the temptation to commit fraud need to be put in place. There should be regular job rotation for the employees in the banks. The idea of keeping a staff in a unit/section of the bank for too long will expose/encourage that staff to fraud. The staff may think because of his/her experience it may be difficult for any fraud perpetrated by them to be discovered. In addition, management should not hesitate to come to the aid of employees, any time there is a genuine financial request particularly in emergency situations. Such assistance not only eliminates the tendency to defraud the organizations, it helps to cultivate a group of dedicated and highly productive workforce.

Since the lack of an effective internal control system, according to the findings is the major cause of bank frauds. It is then recommend that the management of every bank should create and establish a standard internal control system, strong enough to stand against the deceit of fraud in order to promote continuity of operations and to ensure the liquidity, solvency, and going concern concepts of the bank.

In terms of the major characteristics inherent in the fraudulent practices happened in the industry, respondents of the survey identified the frauds prevalent in the sector were frauds high or/and small in value, frauds committed by bank employees or/and by bank managers and frauds committed by outsiders in collusion with bank staffs.

Although different types of fraud were involved depending on whether management, employees and or a third party were the perpetrators, through adequate internal controls by management, better working environments for employees, more stringent requirements for external auditors, and codes of ethics for employees, everyone can start to combat frauds and defalcations within banking corporate of the country.

Concerning fraud detection and prevention systems and procedures employed by banks, the battle to prevent and detect and punish offenders must be fought on two broad fronts. One is to reduce the temptation to commit fraud and the second is to increase the chances of detection. However, it was discovered that various measure undertaken by banks are not enough to reduce the millions and billions of birr being eroded by fraud. They have not yet been able to devise system that cannot be broken by two or more people getting together to commit fraud, especially when this is done by people within the organization working in collusion with someone outside. Therefore, strengthening the fraud detection and prevention systems and procedures, like checking of cashiers, balancing of accounts at branches, verification of signatures, segregation of duties, close circuit television etc, by updating and ensuring the system can handle a proactive stance in warding off fraud and keep losses to minimum.

In respect of means employed in defrauding banks, banking organizations once accept the old adage “where there is a will, there is a way” it becomes possible to devise methodologies for identifying frauds, predicting the likelihood of their occurrence, implementing tactics to monitor and detect fraud schemes, and developing appropriate response processes for minimizing damage and guarding against recurrence.

It is also advisable for banks instead of worrying about every conceivable means employed in defrauding banks under the sun, managers in the banking sector had better to begin by concentrating on the types of fraud most likely to occur in their industry and at their company, and they tailor their fraud management efforts to focus on the levels within the company where fraudulent activities can inflict the most damage. To this end, what the study found out as the major means employed by fraudsters in defrauding banks and recurring mostly were frauds committed related to creating forged checks, ATM frauds, frauds committed through opening account, using assets of the bank for private purpose, frauds related to employment application, computer frauds, frauds related to money transfer fraud and theft of assets. Therefore, in the first place, the personal life style of the employee should also be checked from time to time in order to see any discrepancy between his income and expenses. Signature is always vulnerable to forgery and thumb impression should be introduced along with signature.

To sum up, there is no single reason behind fraud and any explanation of it needs to take account of various factors and a common model (Fraud Triangle) that brings together a number of factors to commit fraud, which built on the premise that fraud is likely to result from a combination of three factors: motivation, opportunity and rationalization. Therefore, considering financial institutions of all kinds are constant targets of fraud perpetrators from inside and outside fraud management must devote substantial financial, human, and technological resources to detection, prevention, and deterrence of frauds of all types and origins.

In light of the above, managers in the banking organization should work hand in hand with workers in deciding on matters affecting them because it would boost the morale of workers and give them that sense of belonging in the organization, prompt payment of remuneration (salaries, allowances, benefits, arrears, overtime, pension scheme and gratuity) to the management workforce in addition to health care facilities, comfortable work environment, promotion, any form of “carrot” can serve etc, this will help energize and boost personnel performance.

However, measures and strategies on fraud are not exhaustive and should be dynamic based on the situation and circumstances of their causes and characteristics, without any doubt, the need to curb and reduce financial crimes (fraud in banks) cannot be overemphasized. It is therefore recommended that banks should co-operate with the government, international agencies and other regulatory bodies to ensure that this dangerous plague is eliminated from the financial system of the country.

Most importantly, the researcher believes that the ability to deal with fraud on a continuous basis and to minimize its potential for harm is a strong indicator of banking organizational health. It is also one of the hallmarks of a flexible banking corporation.

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Questionnaire for the study “an assessment of bank fraud and its management in Ethiopia commercial banks”

Dear participants, this research aims at finding practical means of minimizing the prevalence (occurrence) of fraud in Ethiopia banking sector through administering the questionnaire for branch manager, accountants, and customer service officer of sample private and government owned commercial banks.

As a result this questionnaire prepared and administered for the purpose of gathering relevant data help the researcher to identify various means employed in defrauding banks, to determine the magnitude and frequency of fraud in banks and finally to suggest measures of reducing the incidence of bank fraud in the country.

The researcher assures you a head that responses to this questionnaire will be used to develop general findings and conclusions without specific reference to institutions, clients or credits, except where information may be independently available in the public domain or where permission has been granted approval and all data will be kept confidential (secret) and will be used for academic purpose only.

Finally, as your answer have direct impact on the quality of the study, the researcher kindly request you to answer all of the questions honestly and sincerely.

General instruction: please put ✓ or X mark in the space provided for your appropriate response

Thank you in advance for taking the time to read and answer this short questionnaire!!

Part I. General information

1. Gender	Male	<input type="checkbox"/>	Female	<input type="checkbox"/>
2. Age	Less than 30 years	<input type="checkbox"/>	31 - 45years	<input type="checkbox"/>
	Greater than 45 years	<input type="checkbox"/>		
2. Status of education	Diploma	<input type="checkbox"/>	Masters degree	<input type="checkbox"/>
	Bachelor degree	<input type="checkbox"/>	PhD and above	<input type="checkbox"/>
3. Work experience	Less than 5 year	<input type="checkbox"/>	5 - 15 years	<input type="checkbox"/>
	Greater than 15years	<input type="checkbox"/>		
4. Current position	General manager	<input type="checkbox"/>	Customer service	<input type="checkbox"/>
	Accountant	<input type="checkbox"/>	officer	

Part II. Incidences of fraud in banks

1. Are there any fraudulent acts happened in the bank starting from you became a staff member?

Yes No

2. If your response for question number "1" is yes, what factors make bank staffs to commit fraudulent activities in your organization?

2.1 In effective policies and procedures Yes No

2.2 Inadequate supervision activity Yes No

2.3 In adequate working conditions Yes No

2.4 Staffs staying longer on a particular position Yes No

2.4 Staffs feeling frustrated due to poor salaries Yes No

2.5 Inadequate internal control systems Yes No

2.6 If other than these factors make bank staffs to commit fraud in your organization please specify it;

3. If your response for question number "1" above is **yes**, most of the fraudulent activities made previously in your organization characterized by;

3.1 Frauds high in value/amount, but not frequently committed

Yes No

3.2 Frauds small in value, but frequently committed for a long period of time

Yes No

3.3 Frauds against the bank, bank is the victim

Yes No

3.4 Frauds against outsiders, customers are the victim

Yes No

3.5 Frauds committed by bank employees

Yes No

3.6 Frauds committed by managers

Yes No

3.7 Frauds committed by outsiders/robbers

Yes No

3.8 Frauds committed by outsiders in collusion/collaboration with bank staffs

Yes No

3.9 If the fraud acts committed in your organization characterized by other than these please try to specify it;

.....

Part III. Means of defrauding and their frequency of occurrence in banks

1. Are the fraud detection systems of the bank, like checking of cashiers, balancing of accounts at branches, adequate and effective in preventing fraudulent acts and attempts?

Agree Disagree Undecided

2. If the response for question number "1" is disagree, inadequate fraud detection system in banks operation can be the cause of frequent fraudulent activities in your organization?

Agree Disagree Undecided

3. Are the fraud prevention measures of your organization, such as verification of signatures, segregation of duties, close circuit television, effective and capable of reducing occurrence of frauds?

Agree Disagree Undecided

4. If the response for question number "3" is disagree, inadequate fraud prevention system in banks operation have a direct link with the rate and frequent fraudulent activities in your organization?

Agree Disagree Undecided

5. A table for methods employed defrauding banks and their degree of occurrences

Methods of defrauding banks	Degree of occurrences				
	Most often	Often	Once in a while	Undecided	Never
Creating forged check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ATM frauds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Account opening fraud	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Money transfer fraud	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employment application frauds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computer fraud	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Theft of goods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fund diversion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Personal use of goods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you for your help!

If you have any suggestions regarding the study try to place here;

.....