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**Collage of Business and Economics
Department of Accounting and Finance**

**The Effectiveness of Internal Control System in Detection and
prevention of Fraud in Ethiopian Banking Industry**

By:

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**A thesis submitted for partial fulfillment of the requirements
for the Degree of Masters -MSC in Accounting and Finance**

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**February, 2018
Addis Ababa Ethiopia**

Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another university or elsewhere.

However, works by other authors which served as sources of information and referencing have been acknowledged by references to the authors thereafter.

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Certification

This is to certify that this research project was carried out under my strict supervision and has been approved for submission to the Department in partial fulfillment of the requirements for the award of Degree of Masters -MSC in Accounting and Finance for Addis Ababa University

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Key Words

ACFE Association of certified fraud examiners
APA Auditor of public accountant
CA Control activity
CE Control environment
COSO Committee of sponsoring organization
EIC Effectiveness of internal control
FDP Fraud detection and prevention
IC Information and communication
ICAE Institute of chartered accountant of England
ICS Internal control system
ISA International standard of auditing
KYC Know your customer
LACPA Lebanese association of certified public accountant
MA Monitoring activity
RA Risk assessment
SPSS Statistical Package for Social Sciences

Abstract

Frauds are experiences Banks and other organizations have to mitigate. All organizations whether profit oriented or not, operates within conditions of resource constraints. As a result, various steps are taken and procedures established to ensure that the use of these resources is maximized in achieving organizational goals. The banks and regulatory authorities have proposed and allowed internal control(IC) measures to check the practice of bank fraud. But the effectiveness of any internal control system is dependent on how fluid the system interacts with itself and how embedded it is into the organization's business processes. This paper examines the issues of effective internal control vs. fraud Detection and prevention in the Ethiopian banking industry by adopting primary data. Using a survey method, this work examined how the internal control systems in the Ethiopian banks have aided in combating or preventing fraud in the banking industry. To do this the study examines the effectiveness of internal control in Ethiopian banking industry and based on that effectiveness the researcher test the effectiveness of ICs in preventing and detection of fraud in Ethiopian banking industry. Among the findings were those internal control techniques employed by banks in checking fraud have been effective but put marks on some improvements and the final conclusion of this study is that there is a significant relationship between internal control system component (control environment (CE), risk assessment (RA), control activity(CA), information and communication (IC) and monitoring(MA)) and fraud. As a result, the researcher has given some recommendations so as to provide input for areas of control which needs more attention and due to ongoing process nature of the effective internal control.

Key Words: *Internal control, Fraud prevention and detection, internal control components*

Chapter One

1.1 Introduction

The banking sector plays a very significant role in the development of any economy (Adeyemo, 2012). Banks in most economies are the principal depositories of the public's monetary savings, the nerve center of the payment system, the vessel endowed with the ability of money creation and allocation of financial resources and conduit through which monetary and credit policies are implemented (Idolor,2010 and Akindele,2011). The success of monetary policy, to a large extent, depends on the health of the banking institutions through which the policies are implemented (Adeyemo, 2012; Godwin, 2009; Oye, 2003). Whatever problems which militate against the proper functioning of the banking sector will invariably have multiplier effects on the other sectors of the economy.

This is one of the reasons why it is essential to quickly diagnose any factor which may hamper the smooth functioning of the banking sector and urgently address such issues. Fraud has been identified as a major threat to the growth and development of the banking sector, not only in Ethiopia but globally.

It is necessary that every bank must have an Internal audit department to ensure that accounting systems provide an efficient means of recording and reporting financial transactions, providing management information and protecting the company's asset from fraud and misappropriation (Achibong, 1993). One of the most effective systems for detecting fraud is Internal Control, which is a system by definition, operating in the same environment as fraud itself and serving as an effective, formidable adversary to the fraud scheme (Meshane, 2007).

A system of effective controls is a critical component of bank management and a foundation for the safe and sound operation of banking organizations. A system of strong internal controls can help to ensure that the goals and objectives of a banking organization will be met, that the bank will achieve long-term profitability targets, and maintain reliable financial and managerial reporting. Such a system can also help to ensure that the bank will comply with laws and regulations as well as policies, plans, internal rules and procedures, and decrease the risk of unexpected losses or damage to the bank's reputation.

Internal control systems can be described as the whole system of control, financial and otherwise established by management in order to carry on the business of the enterprises in an orderly and efficient manner. It involves the control environment and control procedure, all the policy and procedure adopted by the directors and management of an entity to assist in achieving their objectives, including adherence to internal policies, the safe-guarding of assets, the prevention and detection of fraud and error as well as the completeness and accuracy of records, with the timely preparation of reliable financial information (Benjamin, 2001).

A fraudulent activity in the banking industry has consistently continued. Substantial amount of money has been committed to check the occurrence. Yet, it seems that the integrity of the employees and management of the concerned banks are questionable. How it is that fraud rate is on increase in spite of improving internal control systems in the Banks. The broad objective of this study is to examine the extent and effectiveness of the internal control techniques has checked the detection of fraud in the practice of bank in Ethiopia. Thus, the study will discuss, assess and explain various components, principles, and attributes of internal controls from different theoretical and empirical sources of data. And also it will assess selected banks internal control systems practical experiences.

1.2 Background of the Study

Banks play very important roles in the economic development of any country. As an important component of the financial system banks channel scarce resources from surplus economic units to deficit units. Thus to an appreciable and reasonable extent they exert a lot of influence on the pattern and trend of economic development through their lending and deposit mobilization activities. The efficient mobilization of savings and its allocation of productive investment by financial institution thereby promote economic growth and development as well as achieving their objectivities, profitability and solvency. All the aforementioned benefits that banks can exert on the economy as a whole can be achieved through an effective internal control system and fraud prevention in the banking industry.

Internal Control system is an independent appraisal function within an organization for the review of system of control and the quality of performance as a service in the organization. The Institute of Chartered Accountant of England and Wales (ICAE& W) defines it as a review of

operations and records, sometime continuous undertaken with a business by a specially assigned staff.

Internal control, therefore is a whole system of controls, financial or otherwise, established by the management in order to carry out the business of an enterprise in an orderly and efficient manner, ensure adherence to management policies, safeguard the assets and secure as far as possible the completeness and accuracy of record.

Fraud, on the other hand is defined by Anyway (1993) as an act of deception deliberately practiced to gain unlawful or unfair advantage to the detriment of another. The international standard on Auditing (ISA) defines fraud as an intentional act by one or more individuals among management, those charged with governance, employees or third parties involving the use of deception to obtain an unjust or illegal advantage. Fraud may include: manipulation, falsification or alteration of documents and records; recording transaction without substances, intentional misapplication of accounting policies etc. just to mention a few.

Therefore, the menace called fraud has been a deadly disease that has infected many financial corporate bodies. The enormous damage fraud has done to the banks, thus the weakening in the financial strength of Ethiopian banks.

To combat this syndrome of fraudulent practices, several measures have been identified as the way out to minimize this act. Internal control system is one of the many measures that are discussed in chapter two of this research work. Internal Control System has been the most single trusted and effective measures that can combat this act of malpractices to the barest minimum. In fact, the National Bank of Ethiopia reported that the backward development in Ethiopia was attributable to the weakness in the Internal Control System of the banks. Therefore, an attempt to bring to barest minimum, if not completely eradicated, the spate of fraud by the measure of internal control system gave rise to this research study.

1.3 Statement of problems

Each company needs to have in place an appropriate and effective internal control environment to ensure that the company is managed and controlled in a sound and prudent manner. (Sultana and Haque, 2011)

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. 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. With this respect, scholars 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. Accordingly, 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.

An effective internal control system and good system of fraud prevention will ensure efficient mobilization of savings and its allocation to productive investment, thereby promoting growth and development, as well as achieving their objectives, profitability, solvency and ultimately restores the lost confidence of customers and lenders overtime. However, the system of internal control is mainly the function of management to establish such and the ultimate aim of this is to minimize and prevent the occurrence of fraud in the bank. Thusit should be noted however that fraudulent practices in the banks is usually cause through lapses or inadequacies which manifested in various ways. Therefore, there is need for the bank management to ensure that the internal control system is very strong as much as possible to cover those lapses and inadequacies which manifested in various ways known to them.

Fraud is a major challenge to the entire business world, no company is immune to it and it is in all facets of life (Olorunsegun, 2010). The banking public expects accountability, fairness, transparency and effective intermediation from banks. The banks are expected to ensure that they carry out their responsibilities with sincerity of purpose which is devoid of fraudulent practices.

To this endseveral researchers (ie. Aberahm yalew Effectiveness of ICS in Ethiopian Commercial Banks; Fregent Manahale Effectiveness of ICS in CBE) hasassessed the effectiveness of internal control in various Ethiopian Commercial Banks in its theory and the results also enabled bank managers and practitioners to better secure their accounting

information systems and to champion the security of information technology for the success of their banks. But still though there were known cases of fraud in the sector.

The objective of this study is to test how components of internal control system is effective in detection and prevention of fraud in existing Ethiopian banking industry and the determinants that can be effective in the management and control of financial fraud against Ethiopian Banking sector, It is this problem which necessitates this research study.

1.4 Research Questions

This paper has assessed the effectiveness of internal controls and its effect in detection of fraud in the Ethiopia banking industry. For the purpose of the study, the following questions were some of the problem-solving questions that come up during the course of carrying out this study.

1. Are the five Components of the internal control system effective in the banking industry of Ethiopian?
2. Does the effective Internal Control System have impact on the overall management of banks?
3. Can the effective Internal Control Systems of bank ensure fraud prevention and detection?
4. Can strong internal control system fish-out actors that contributed to incidence of fraud in banks?
5. Is there designed strategy to identify the incidences of frauds and mistakes caused by personal distraction, carelessness, fatigue, errors in judgment, or unclear instructions?
6. What are the effective internal controls activities consistently applied based on findings and recommendations?

1.5 Study Hypotheses

The study tested the following hypotheses:

H₀₁: There is no significant relationship between control environment and fraud control in Ethiopian Banking industry.

H₀₂: There no significant relationship between risk assessment and fraud control in Ethiopian Banking industry.

H₀₃: There is no relationship between control activity and fraud control in Ethiopian Banking industry.

H₀₄: There is no relationship between information and communication and fraud control in Ethiopian Banking industry.

H₀₅: There no significant relationship between monitoring and fraud control in Ethiopian Banking industry

1.6 Objective of The study

The general objectives of this research were to make an assessment of internal control system effectiveness in detection and prevention of fraud in existing Ethiopian banking industry. The specific objectives of the study are that:

1. To determine the internal control measures that are effective and other determinants that are significant in the detection, prevention and control of fraud in Ethiopian banks.
2. To examining efficiency of the internal control techniques in banks
3. To examine the effectiveness of internal control measures against fraud detection in commercial banks in Ethiopia.
4. To examine the measures put in place by commercial banks against fraud occurrence in Ethiopian banking sector.
5. To find that the appropriate actions are applied based on control findings and recommendations
6. To assess whether the bank's policies and procedures can lead to producing reliable financial reports.
7. To review the bank's monitoring activities of effective internal control systems.

1.7 Scope and limitation of the study

Even if effective internal control is essential for every organization, due to the fact that there are several commercial banks in Ethiopia, the study was limited to only selected commercial banks in Ethiopia which believed by the researcher to represent the hole industry.

Even though this research was to assess the effectiveness of internal control in detection and prevention of fraud in Ethiopia banking industry, the range of the research does not give findings

that can be generalized. There were also resource constraints, as well as the difficulties in accessing data especially in related to fraud activity records.

1.8 Significance of the study

Assessing the banks internal control systems effectiveness will help the policy/decision makers of the organization to come up with new ideas, and also for the organization members as a whole to achieve better performance through minimizing its risks.

Establishment of an adequate and effective Internal Control and its effective review and assessment by the management will go a long way in preventing fraudulent acts and practices among the fraudsters within the banks and other third parties. The usefulness and the expected benefit of the study to the banking industry entail the following:

1. The study will provide an insight into the internal controls that commercial banks are undertaking to prevent and frustrate frauds.
2. The study may also be of critical importance to commercial bank's management at both branch level and head office on the controls in place against frauds, the fraud risks and the effectiveness of controls against fraud incidences. This information may provide the ground work for policy formulation, amendment and emphasis.
3. It will help in knowing and studying how the Internal Control Components or elements are used to detect and prevent fraud.
4. The study will help to review fraudster's mode of operation and thereby recommend ways to avert their operations through the use of internal control system.
5. It will also result in reduction in an attempt to defraud by the management and staff as a result of lay-down expected punishment.
6. It will also enhance customers' confidence and trust in the banking industry as a result of strong and effective internal control being put in place.
7. This study will ultimately help in promoting economic growth and development as a result of efficient mobilization of savings thereby enhancing profitability and solvency in the bank, all of which are achievable through implementation of strong system of internal control.

1.9 Organization of the Study

The research paper has five chapters; the first chapter includes background of the study, statement of the problem, research questions, research hypothesis, objectives, significance and scope of the study. The second chapter also about literature review which is related to the study area and it gives a detail description of the study phenomenon by relating other scholar papers on the area. The third chapter is all about methodology of the study in which research approach and method, sources of data, sampling techniques and procedure, method of data collection and analysis and the like has been included. In the fourth chapter the collected data was analyzed, discussed and interpreted. And the last chapter gives conclusion, recommendation, references and annex.

Chapter Two

Literature Review

2.1.Introduction

It is the responsibility of bank Management to put measures in place that will ensure effective internal control system to be in operation. Unless proper policy and procedure are in place, a bank may not be able to prevent or minimize the occurrence of fraud. Hence, effective internal control system needs to be in place.

This chapter therefore attempts to discuss the conceptual and theoretical framework relating to this research work. The current and relevant literature will be sought for and thoroughly reviewed.

Internal control is a gamut of measures that seeks to detect errors, frauds and irregularities, to ensure that all transactions are correctly processed and ensure that all assets are safeguarded through restriction of access to authorized persons only. It also enables work to be performed by a person and any omission or error can be traced to that person and to make the work of the auditors easier (Aguotu, 2002).

According to Gayasi (2000), one of the ways to detect fraud, though ex-post is through internal audit. Internal audit is the process engaged to check if due process and procedures have been followed in the carrying out the operations of an organization which is carried out regularly and as when needed. Internal audit functions to provide independent view of financial, accounting and other processes to the management as a basis for protective and constructive service. It performs well if it has sufficient standing and authority within the bank and at the same time operates according sound principles (Bank for International Settlement, 2012). It acts a check on the way in which the operations of the firm or the organization are done.

2.2.Definition of Internal Control System

COSO in 1992, defined internal controls as a process and rightly so because an internal control system is not an end in itself but a means to an end. Internal control is defined as a “process effected by an entity's board of directors, management and other personnel designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- ✓ Effectiveness and efficiency of operations
- ✓ Reliability of financial reporting
- ✓ Compliance with applicable laws and regulations” (COSO, Internal Control-Integrated Framework, 1992).

Again the Basel committee on banking supervision defined internal controls “as a process affected by board of directors, senior management and all levels of personnel. It is not solely a procedure or policy that is performed at a certain point in time, but rather it is continually operating at all levels within the bank” (Basel, 1998).

This definition reflects certain fundamental concepts. Internal control is geared to the achievement of objectives in one or more categories: operations, reporting, and compliance. It is also a process consisting of ongoing tasks and activities; a means to an end, not an end in itself. In addition, it can be affected by people not merely about policy and procedure manuals, systems, and forms, but about people and the actions they take at every level of an organization to affect internal control. Internal control used to provide reasonable assurance but not absolute assurance, to an entity’s senior management and board of directors. Adaptable to the entity structure; flexible in application for the entire entity or for a particular subsidiary, division, operating unit, or business process.

2.3.Objectives and Role of the Internal Control

Internal control comprises the plans, methods, policies and procedures used to fulfill the mission, strategic plan, goals and objectives of the entity. Internal control serves as the first line of defense in safeguarding assets. In short, internal control helps managers achieve desired results through effective stewardship of public resources.

Internal control of a bank is the bank system defined and implemented under its responsibility. The system more particularly is design to ensure that certain objectives which are fundamental to the operation of the bank are achieved. These objectives and related risks can be broadly classified into one or more of the following categories:

1. Ensure the effectiveness and efficiency of operations (Performance objectives)
2. Ensure reliability of financial reporting (Information objectives)
3. Ensure compliance with applicable laws and regulations (Compliance objectives)

4. Ensure that the instructions and directional guidelines fixed by the executive management or the management board are applied.

The committee of sponsoring organization (COSO) of the tread way commission (1999) categorizes the above stated objectives of internal control system as a means to provide reasonable assurance that:

1. Assets are safeguard and used for business purposes
2. Business information is accurate
3. Employees comply with laws and regulations

Internal control is therefore neither limited to a set of procedures nor simply to accounting and financial processes. Nor does it embrace all of the initiatives taken by the executive bodies or by management, such as defining company strategy, fixing objectives, management decisions, and dealing with the risk or monitoring performance.

1. Ensure the effectiveness and efficiency of operations (Performance objectives)

This objective is to ensure the correct functioning of the bank's internal processes, particularly those implicating the security of its assets.

All operational, industrial, commercial and financial processes are concerned. In order for processes to function correctly, standards or operating principle have to be established and performance and profitability indicators set up.

By assets, it must be understood not only the tangible assets, but also the intangible assets such as know-how, image or reputation. These assets can disappear in the wake of thefts, frauds, lack of productivity, errors, or result from a bad management decision or an internal control weakness. Special attention should be paid to the related processes in these cases.

Similarly, for the processes involved in the elaboration and processing of accounting and financial information. These processes include act only those which deal directly with the preparation of financial reports, but also the operational processes which generate the accounting data.

2. Ensure reliability of financial reporting (Information objectives)

The reliability of financial information can only be obtained through the implementation of internal control procedures which are capable of faithfully recording all the operations performed by the organization. The quality of this internal control system can be targeted by means of:

- A. Segregation of duties, enabling a clear distinction to be made between recording duties, operational duties and retention duties.
- B. Function descriptions which should enable the origins of the information prepared to be identified, together with its recipients.
- C. An accounting internal control system enabling to check that the operations have been performed in accordance with general and specific instructions, and that they have been accounted for so as to produce financial information which complies with generally accepted accounting principles.

Basle committee on banking supervision states that information objectives of internal control address the preparation of timely, reliable, relevant reports needed for decision-making within the banking organization. They also address the need for reliable annual accounts, other financial statements and other financial-related disclosures and reports to shareholders, supervisors, and other external parties. The information received by management, the board of directors, shareholders and supervisors should be of sufficient quality and integrity that recipients can rely on the information in making decisions. The term reliable, as it relates to financial statements, refers to the preparation of statements that are presented fairly and based on comprehensive and well-defined accounting principles and rules.

3. Ensure compliance with applicable laws and regulations (Compliance objectives)

This refers to the laws and regulations to which the bank is subject. The laws and regulations in force determine the behavioral standards that the company incorporates into its compliance objectives. Given the large number of areas that exist (company law, commercial law, security, environment, social arts), the banks organization needs to be structured in such a way so that it:

- Is aware of the various rules that apply to it
- Can be informed in due time of any changes that are made for them (legal monitoring)
- Can transpose these rules into its internal procedures

➤ Can inform and train staff on those rules which affect them

4. Ensure that the instructions and directional guidelines fixed by the executive management or the management board are applied.

The instructions and directional guidelines given by executive management or the management board staff to understand what is expected of them and to be aware of the scope of their freedom of action. These instructions and directional guidelines must be communicated to the staff concerned, based on the objectives allocated to each of them, so as to provide guidelines on how their activities should be conducted. These instructions and directional guidelines must be defined in line with the bank's overall objectives and the inherent risks.

Basle Committee on Banking Supervision September 1998 states that a system of effective internal controls is a critical component of bank management and a foundation for the safe and sound operation of banking organizations. A system of strong internal controls can help to ensure that the goals and objectives of a banking organization will be met, that the bank will achieve long-term profitability targets, and maintain reliable financial and managerial reporting. Such a system can also help to ensure that the bank will comply with laws and regulations as well as policies, plans, internal rules and procedures, and decrease the risk of unexpected losses or damage to the bank's reputation.

An internal control system is a continuous built-in component of operations, effected by people, that provides reasonable assurance, not absolute assurance, that an entity's objectives will be achieved.

Internal control is not one event, but a series of actions that occur throughout an entity's operations. Internal control is recognized as an integral part of the operational processes management uses to guide its operations rather than as a separate system within an entity. In this sense, internal control is built into the entity as a part of the organizational structure to help managers achieve the entity's objectives on an ongoing basis.

People are what make internal control work. Management is responsible for an effective internal control system. As part of this responsibility, management sets the entity's objectives, implements controls, and evaluates the internal control system. However, personnel throughout an entity play important roles in implementing and operating an effective internal control system.

An effective internal control system increases the likelihood that an entity will achieve its objectives. However, no matter how well designed, implemented, or operated, an internal control system cannot provide absolute assurance that all of an organization's objectives will be met. Factors outside the control or influence of management can affect the entity's ability to achieve all of its objectives. For example, a natural disaster can affect an organization's ability to achieve its objectives. Therefore, once in place, effective internal control provides reasonable, not absolute, assurance that an organization will achieve its objectives. (Mwakimasinde, 2014)

2.4. Internal Control System Theory

A system is a set of interrelated and interdependent components that interact in a way to achieve a set goal. These components or sub-systems are inter-dependent and the failure of one component leads to the failure of the whole system. An organization is a complex system which is divided in various sub-systems (Units, divisions, departments etc) and hence requires a system of controls over units, divisions, departments, etc, for its effectiveness and survival.

An effective internal control system is an integrated system with interrelated components, supporting principles and attributes. Harvey and Brown (1998) identified control environment, accounting system and control procedures as the major components of internal controls (Harvey & Brown, 1998). According to Grieves, an internal control system available to a firm consists of: management oversight and the control culture, risk recognition and assessment, control of activities and segregation of duties, information and communication and monitoring activities and correcting deficiencies (Grieves, 2000). The paper adopts COSO's 1992 integrated internal control framework. The Committee of Sponsoring Organizations (COSO), was commissioned in the 1980's by National Commission on Fraudulent Financial Reporting (the Treadway Commission) to identify factors that caused fraudulent corporate financial reports and make recommendations, and has since developed to become a thought leader in enterprise risk management (ERM), internal control, and fraud deterrence (Amudo & Inanga, 2009). In 1992, COSO published a landmark report on internal control: Internal Control - Integrated Framework, referred to as "COSO". The framework classifies an organization's internal control system in to five integrated components which must be built into business processes across the entire entity, in its efforts to achieve objectives.

The components are:

1. Control environment
2. Risk assessment
3. Control activities
4. Information and communication
5. Monitoring activities.

Internal control system is an integrated system, integrated with management processes to achieve overall organizational goals. For an organization to achieve its organizational objectives, then the five control components must be integrated into management processes over the entire organization (Subsidiaries, divisions, units). Like the body system, the internal control components and business processes must interact ceaselessly for a healthy and effective internal control system. The seamless and collaborative interaction of an internal control system with business processes is a prerequisite for the effectiveness of an internal control system. Control objectives and measures that are derived from the monitoring and assessment of risks must be integrated into operational business unit's business practices (Price water house Coopers, 2007) through an effective information and communication control component that ensures smooth flow of information to personnel responsible for internal controls across the entity.

2.5.Components of Internal Control

COSO integrated framework provides five integrated components of internal control. The five components of internal control must be effectively designed, implemented, and operating together in an integrated manner, for an internal control system to be effective. The five components of internal control are as follows:

2.5.1. Control Environment

The control environment is the set of standards, processes, and structures that provide the basis for carrying out internal control across the organization. The board of directors and senior management establish the tone at the top regarding the importance of internal control including expected standards of conduct. Management reinforces expectations at the various levels of the organization. The control environment comprises the integrity and ethical values of the organization; the parameters enabling the board of directors to carry out its governance oversight

responsibilities; the organizational structure and assignment of authority and responsibility; the process for attracting, developing, and retaining competent individuals; and the rigor around performance measures, incentives, and rewards to drive accountability for performance. The resulting control environment has a pervasive impact on the overall system of internal control. (COSO, 2009)

It is the foundation for an internal control system. It provides the discipline and structure to help an entity achieve its objectives. The control environment is the foundation for an internal control system. It provides the discipline and structure, which affect the overall quality of internal control. It influences how objectives are defined and how control activities are structured. The oversight body and management establish and maintain an environment throughout the entity that sets a positive attitude toward internal control. (SOX Guidance, 2007)

It establishes integrity and ethical values, establish oversight structure, develop expectations of competence, and maintain accountability to all members of the oversight body and key stakeholders.

2.5.2. Risk Assessment

Every entity faces a variety of risks from external and internal sources. Risk is defined as the possibility that an event will occur and adversely affect the achievement of objectives. Risk assessment involves a dynamic and iterative process for identifying and assessing risks to the achievement of objectives. Risks to the achievement of these objectives from across the entity are considered relative to established risk tolerances. Thus, risk assessment forms the basis for determining how risks will be managed. A precondition to risk assessment is the establishment of objectives, linked at different levels of the entity. Management specifies objectives within categories relating to operations, reporting, and compliance with sufficient clarity to be able to identify and analyze risks to those objectives. Management also considers the suitability of the objectives for the entity. Risk assessment also requires management to consider the impact of possible changes in the external environment and within its own business model that may render internal control ineffective. (Rokeya Sultana and Muhammad Enamul Haque, 2011)

It also assesses the risks facing the entity as it seeks to achieve its objectives. This assessment provides the basis for developing appropriate risk responses. Oversee management's assessment

of risks to the achievement of objectives, including the potential impact of significant changes, fraud, and management override of internal control. (COSO, 2009)

2.5.3. Control Activities

Control activities are the actions established through policies and procedures that help ensure that management's directives to mitigate risks to the achievement of objectives are carried out. Control activities are performed at all levels of the entity, at various stages within business processes, and over the technology environment. They may be preventive or detective in nature and may encompass a range of manual and automated activities such as authorizations and approvals, verifications, reconciliations, and business performance reviews. Segregation of duties is typically built into the selection and development of control activities. Where segregation of duties is not practical, management selects and develops alternative control activities.

The actions management establishes through policies and procedures to achieve objectives and respond to risks in the internal control system, which includes the entity's information system. Provide oversight to management in the development and performance of control activities. (Basle, 1998)

2.5.4. Information and Communication

Information is necessary for the entity to carry out internal control responsibilities to support the achievement of its objectives. Management obtains or generates and uses relevant and quality information from both internal and external sources to support the functioning of other components of internal control. Communication is the continual, iterative process of providing, sharing, and obtaining necessary information. Internal communication is the means by which information is disseminated throughout the organization, flowing up, down, and across the entity. It enables personnel to receive a clear message from senior management that control responsibilities must be taken seriously. External communication is twofold: it enables inbound communication of relevant external information, and it provides information to external parties in response to requirements and expectations. (COSO, 2009)

The quality information management and personnel communicate and use to support the internal control system. Analyze and discuss information relating to the entity's achievement of objectives.

2.5.5. Monitoring Activities

Ongoing evaluations, separate evaluations, or some combination of the two are used to ascertain whether each of the five components of internal control, including controls to affect the principles within each component, is present and functioning. Ongoing evaluations, built into business processes at different levels of the entity, provide timely information. Separate evaluations, conducted periodically, will vary in scope and frequency depending on assessment of risks, effectiveness of ongoing evaluations, and other management considerations. Findings are evaluated against criteria established by regulators, recognized standard-setting bodies or management and the board of directors, and deficiencies are communicated to management and the board of directors as appropriate.

Activities management establishes and operates to assess the quality of performance over time and promptly resolve the findings of audits and other reviews. Scrutinize the nature and scope of management's monitoring activities as well as management's evaluation and remediation of identified deficiencies. (Dr. Theofanis, Karagiorgos and George Drogalas, Alexandra Dimou, 2001)

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

There is synergy and linkage among these components, forming an integrated system that reacts dynamically to changing conditions. The internal control system is intertwined with the entity's operating activities and exists for fundamental business reasons. Internal control is most effective

when controls are built into the entity's infrastructure and are a part of the essence of the enterprise. "Built in" controls support quality and empowerment initiatives, avoid unnecessary costs and enable quick response to changing conditions.

There is a direct relationship between the three categories of objectives, which are what an entity strives to achieve, and components, which represent what is needed to achieve the objectives. All components are relevant to each objectives category. When looking at any one category the effectiveness and efficiency of operations, for instance all five components must be present and functioning effectively to conclude that internal control over operations is effective. (SOX Guidance, 2007).

2.6.Internal Control Systems Effectiveness

The effectiveness of an internal control system is dependent on how fluid the system interacts with itself and how embedded it is into the organizations business processes. Again for an internal control system to be effective and provide that needed assurance to the board, there should be some “agents of effectiveness”. These are a vibrant board, which does not wait to be informed but a board that understands the business and questions the status quo, and an effective, independent internal audit unit. Internal control is a process, but its effectiveness is a state or a condition at point of the process. Therefore, it is important for management and the board to evaluate and assess the effectiveness of the internal control system periodically. According to COSO, an internal control system can be judged effective on the high level if the board of directors and management have reasonable assurance that:

1. They understand the extent to which the entity’s operations objectives are being achieved,
2. Published financial statements are being prepared reliably,
3. Applicable laws and regulations are being complied with (COSO, Internal Control-Integrated Framework, 1992).

An internal control framework that places too much emphasis on detailed explanation of the different components of the system and methods for their design but ignore details on how each of the components can be measured to assess their effectiveness is a deficient control system in itself (Amudo & Inanga, 2009). The effectiveness of an internal control system is a function of

the workings of the five components of the system. Consequently, assessing effectiveness of internal controls must be done in relation to the components of internal control. Judging whether an internal control system of an organization is effective or not is a subjective verdict resulting from the assessment of the workings of the five components of internal control system across the entire organization (COSO, Internal Control -Integrated Framework, 2011). In assessing internal control effectiveness, the evaluator must understand the operations of the five components, the intent of the principles and assumptions underlying the operations of the control components and how they are applied across the organization. The researchers in assessing the effectiveness of the internal control system of Ghanaian banks, adopts COSO's 1992 principles and assumptions of assessing the effectiveness of internal control systems.

2.7.Theory of Fraud

Chakrabarty (2013) defines fraud as any behavior by which one person intends to obtain a dishonest advantage over another where the person makes an illicit gain while the other party incurs a loss. The Institute of Professional Practices Framework (Sommer, 2014) defines fraud as any illegal act characterized by deceit or concealment or violation of trust which do not directly depend on the use of violence, perpetrated in firms to obtain money, property, or services, to avoid payment or loss of services, or to secure personal or business advantage. While Chakrabarty categorizes the frauds into three different types as technology related, know your customer (KYC) related and advances related. ACL groups fraud in banking into eleven sections with four being quite significant among which are corruption, cash in hand, billing and cheque tampering, non-cash skimming and larceny among several others. In these days of technology enabled payment platforms, it is reported that the greatest value of frauds occurs from this channel. KYC is related to customers planned fraud in any form either through duplication of data or through falsification or obtainment of data to commit fraud. while the third is related to advances portfolio which may cut across several banks.

Khanna and Arora (2009) from the Indian environment believes the reason for the rise in fraud profile in the banking industry is because the procedures jointly instituted by the banks and the Reserve Bank were not fully implemented. The paper cites overburdened staff, lack of training and competition as other causes of the fraud. The accounting firms of Ernst and Young (2010) and Deloitte (2015) have attempted to help stem fraud in several ways.

Fraud detection or prevention is a function that should be system-wide, but mostly in the realm of internal audit group. Fraud should not go through and be undetected in any accounting year where an effective internal control and audit process are in place.

Every company should want to prevent fraud from happening against their organization and most companies will not readily admit that their organizations may be vulnerable to any significant fraud. The reality is that many individuals can commit fraud against any organization with a clever understanding of the company's internal controls structure.

Fraud can be committed by an individual within an organization or external to the organization. It is generally described in three categories: asset misappropriation, fraudulent accounting and financial reporting, and corruption.

Fraud is a relevant issue worthy of discussion, particularly in today's economy. As the price of a gallon of gasoline and the adjustable interest rates on certain home mortgages continue to rise, employment stability and incentive compensation payouts continue to decline. This dichotomy can increase the pressures and incentives for individuals to concoct fraud schemes to perpetrate

2.8.Fraud Triangle Theory by Donald Cressey (1973)

The fraud triangle originated from Donald Cressey's hypothesis: "Trusted persons become trust violators when they conceive of themselves as having a financial problem which is non-shareable, are aware this problem can be secretly resolved by violation of the position of financial trust, and are able to apply to their own conduct in that situation verbalizations which enable them to adjust their conceptions of themselves as trusted persons with their conceptions of themselves as users of the entrusted funds or property" (Akelelo, 2012).

This theory was first coined by Cressey in 1973. Fraud triangle theory identifies that lead culprits to commit fraud. Fraud triangle describes three major factors that are present in any fraud situation:

- a) perceived pressure
- b) Opportunity
- c) Rationalization

Fraud cannot happen in absence of the aforesaid elements and the seriousness of the fraud will depend on the strength of the above elements (Ruankaew, 2013). The elements with are explained below under each heading.

a) Perceived pressure for committing fraud in financial institutions

Pressure in case of fraud can be likened to the motivation that is what in one's life that drives one to commit fraud. Pressure sometimes involves personal situations that create a demand for more money; such situations might include vices like drug use or gambling or merely life events like a spouse losing a job. At other times, pressure arises from problems on the job; unrealistic performance targets may provide the motive to perpetrate fraud. Motivators can also be non-financial. There may be high pressure for good results at work or a need to cover up someone's poor performance. Addictions such as gambling and drugs may also motivate someone to commit fraud (Ruankaew, 2013).

b) Opportunity for committing fraud

Of the three elements of the Fraud Triangle, opportunity is often hard to spot, but fairly easy to control through organizational or procedural changes. The Opportunity to commit fraud is possible when employees have access to assets and information that allows them to both commit and conceal fraud. Employees are given access to records and valuables in the ordinary course of their jobs. Unfortunately, that access allows people to commit fraud. Over the years, managers have become responsible for a wider range of employees and functions. This has led to more access for them, as well as more control over functional areas of companies. Access must be limited to only those systems, information, and assets that are truly necessary for an employee to complete his or her job (Lebanese Association of Certified Public Accountants (LACPA), 2009).

Opportunity is created by weak internal controls, poor management oversight, and/or through use of one's position and authority. Failure to establish adequate procedures to detect fraudulent activity also increases the opportunities fraud for to occur, (Ruankaew, 2013). Committing fraud through use of one's position and authority in many occasions happens when internal controls are weak or do not exist, or where there is poor management oversight. Chances of committing fraud increases due to layoffs and staffing shortages when they weaken or eliminate internal controls. (Auditor of Public Accounts (APA), 2011).

c) Rationalization of committing fraud in financial institutions

There are two aspects to rationalization:

1. The fraudster must conclude that the benefits to be realized from a fraudulent activity outweigh the possibility for detection.
2. The fraudster needs to justify the fraud. Justification can be related to job dissatisfaction or perceived entitlement, or a current intent to make the victim whole sometime in the future, or saving one's family, possessions or status. Rationalization is discernable by observation of the fraudster's comments or attitudes (LACPA, 2013).

Rationalization involves a person reconciling his/her behavior with the commonly accepted notions of decency and trust. For those who are generally dishonest, it is probably easier to rationalize a fraud. For those with higher moral standards, it is probably not so easy. Fraudsters have to convince themselves that to defraud is alright with "excuses" for their behavior.

Common rationalizations include making up for being underpaid or replacing a bonus that was deserved but not received. A thief may convince himself that he is just "borrowing" money from the company and will pay it back one day. Some embezzlers tell themselves that the company doesn't need the money or won't miss the assets. Others believe that the company "deserves" to have money stolen because of bad acts against employees.

2.9. Classification of Fraud

Within the scope of this study attempts shall be made to critical examine the two broad schemes of frauds. Fraud is classified into two Management fraud and Employee fraud.

2.9.1. Management fraud

According to Fakunle (2006), management fraud often involves the manipulation of the records and the account, typically by the enterprise's senior officer with a new to benefiting in come indirect way. An example is obtaining finance under false presences or concealing a material, worsening off the company's true position i.e. window dressing.

Management fraud is usually perpetrated by the management staff of an organization, which includes director, general managers, managing directors etc. The classes of victims of

management frauds are investors and creditors and the instrument of perpetration is financial statement.

The essence of management fraud most times is to attract more shareholders to come and invest in the organization. It is also perpetuated, so that organization will be in better position of obtaining loans from banks because a good statement will show a health look, hence it will be a good collateral security.

2.9.2. Employee fraud

This is also known as non-management fraud. These are frauds perpetrated by the employees of an organization. It usually involves falsification of some kind, like false documents, lying, exceeding authority or violating an employer's policies, embezzlement of company's funds, usually of cash or other assets. It consists of three phases, which are; the fraudulent act, the conversion of the money or property to the fraudsters and the cover-up.

Employee frauds are more likely to be encountered where internal controls are weak. Other types of employee's frauds according to Awe (2005) are as follows; fictitious payment of supplies, wages fraud (payroll fraud).

It is important to note that all these form of employee fraud are perpetrated, so that the perpetrators will have an undue benefit from all the irregularities made, as embedded in the definition of fraud

2.10. Type of Bank's Common Fraudulent Practices

Ovuakporia (1994) gave account of thirty-three types of bank frauds in the banking sector. These includes theft, embezzlement, defalcations, forgeries, substitution, suppression, payment against unclear effects, unauthorized lending, lending to 'ghost' borrowers, kite flying and cross firing, unofficial borrowing, foreign exchange malpractice, impersonation, over-involving, manipulation of vouchers, fictitious accounts, over and under valuation of properties, false declaration of cash shortages, falsification of status reports, duplication of cheque books, mail transfer, interception of clearing cheques, computer frauds, fake payments, teeming and lading, robbers and others.

The above numerous types of fraudulent practices in banks, serve as threats to the success of many banks. If adequate preventive and detective measures are not put into action, it could lead to the complete failure of financial institutions.

2.11. Causes of Bank Frauds

There are many identified causes of fraud in banks. They vary from institutional, economic, social, psychological, legal and even infrastructural causes. The immediate causative agents of frauds in general as provided by Ogbunka (2002) are as follows:

- ✓ Availability of opportunity to perpetrate frauds and forgeries
- ✓ Human greed, avarice, instability
- ✓ Increasing incidence of unemployment and job insecurity
- ✓ Increasing financial burden on individuals
- ✓ Societal expectations
- ✓ Inadequate training of man power
- ✓ Risk on the fraudsters may be low or none
- ✓ Poor/weak management control, monitoring and supervision
- ✓ Weak internal control system of the bank.

2.12. Five Key Anti-Fraud Controls

The three factors (pressures/incentives, opportunity, and rationalization) are commonly referred to as the fraud triangle and when all three of those conditions are present the risk of fraud being perpetrated can increase significantly. Of those three conditions, opportunity is the one condition that can most effectively be managed to address fraud risks. This condition is principally managed by designing and implementing a control environment that prevents, detects and deters most fraudulent behavior whether conducted by employees, vendors, consultants or senior management. As part of such a control environment there are five key anti-fraud controls that companies can implement and it begins with the tone at the top.

1. Prevent: A Truly Independent and Empowered Audit Committee

Organizations that have stakeholders and shareholders independent of management (whether publicly traded or privately held) should also have an audit committee that is independent of management⁴. The audit committee should be knowledgeable of the company's fraud risk

exposure and aware of the steps management is taking to monitor and mitigate those risks. Truly independent audit committees may also maintain healthy levels of skepticism to promote continuous evaluations of the company's anti-fraud programs and controls. The audit committee has the responsibility to monitor the results of the annual audits and quarterly reviews, and is also responsible for directing the activities of the internal audit department (if one exists within the organization).

According to the Association of Certified Fraud Examiners (ACFE) 2008 Report to the Nation, internal auditors and independent auditors accounted for approximately 29% of the occupational fraud discovered. The independent auditors have auditing standards that they follow to identify material misstatements due to fraud (SAS 99). However, empowered audit committees can play an active role in the direction, monitoring, and evaluation of the internal auditors to ascertain whether the procedures performed are in those areas that carry the most significant risks. Those significant risk areas can be effectively identified through conducting a fraud risk assessment.

2. Prevent: Conduct Detailed Fraud Risk Assessments

PCAOB Standard No. 5, released in 2007, encourages public companies to conduct annual risk assessments and use the results of those assessments to identify the key controls in the significant areas. PCAOB Standard No. 5 also made specific reference to fraud, encouraging management to identify those key controls that are specifically designed to address the risk of fraud.

One purpose of a fraud risk assessment is to help focus management's attention on the significant fraud risks to be addressed. A fraud risk assessment can be recurring and systematic, and it can involve various levels of management across all functions of the business. An effective fraud risk assessment may include specific fraud schemes that could be perpetrated against the organization, including the people or departments within the organization that could commit each scheme, the likelihood of that scheme occurring against the company in the current year, and the magnitude of impact that the scheme would have on the organization.

The specific fraud schemes identified can be linked to existing internal controls within the organization that can mitigate the fraud risk. The fraud risk assessment can also include a gap analysis that includes a remediation plan for significant fraud risks that could not be linked to

existing internal controls. Some companies may have the appropriate resources internally to apply effective interviewing techniques to identify the fraud schemes that could occur across the organization. However, many companies would be well-advised to consider the use of an external provider to assist in conducting the interviews and facilitating the brainstorming sessions so that the meetings are relevant and focused.

One of the advantages of conducting the fraud risk assessment throughout the organization is that it can increase the visibility of management's attitudes towards managing fraud risks. The increase in management's communication about fraudulent behavior typically results in greater employee sensitivity to the importance of acting in an appropriate manner (thereby, potentially reducing some of the rationalization that can occur) and the confidence to report suspicious or inappropriate activities.

3. Deter & Detect: Promote the Tools for Effective Reporting of Suspicious or Inappropriate Activities

The Sarbanes Oxley Act requires audit committees to establish procedures for the receipt, retention, and treatment of employee complaints across a variety of issues, including fraud and misconduct, and a whistleblower hotline is one of the easiest and least expensive of such procedures. According to the 2008 ACFE Report to the Nation, approximately 46% of all fraud was uncovered through tips. However, the existence of a hotline may not be enough.

Management should also consider conducting periodic evaluations to determine whether the whistleblower hotline is effective, including benchmarking analysis against competitors. The company should consider the use of an experienced outside agency managing the whistleblower hotline to enhance the perception of confidentiality. If an outside agency is not used to manage the whistleblower hotline, the whistleblower complaints can be initially reviewed by an ethics committee of the company (or similar internal resource with direct access to the audit committee) and reported timely to individuals with the appropriate group best equipped to handle the matter.

Since fraud can also include bribery and corruption, access to the whistleblower hotline can be made available to vendors and customers as well as employees. For companies doing business globally, it is advisable for the hotline to be available 24 hours a day, 365 days a year and have

multi-lingual capabilities. Most importantly, the availability of the hotline should be communicated on a regular basis, at least annually. As part of this communication the company should consider identifying for the employees the types of activities that should be reported.

4. Prevent & Deter: Anti-Fraud Policy and Appropriate Trainings

It is not uncommon for employees to be confused as to what activities constitute fraud or misconduct against the organization. Some employees may abuse the company's reimbursement policy of requiring receipts for expenses greater than \$20, and other employees may conduct side business during work hours using the organization's resources. While these activities may not be regularly called out as significant fraud, they nonetheless misuse the company's assets and resources. Further, it is important to remember that most fraud starts out small. As the fraud scheme continues over a period of time, the typical perpetrator begins to gain confidence in the fraud scheme and may move on to fraud schemes involving larger amounts.

The tolerance of these types of behavior within an organization could also send the wrong message about management's lenience towards employee misconduct and fraudulent behavior. This misunderstanding can be addressed by drafting and publishing an anti-fraud policy that clearly defines fraud and misconduct. This definition of fraud can also include specific, relevant examples of behavior that is not acceptable within the organization. Once the anti-fraud policy is published, periodic trainings can be held throughout the organization to provide its employees with a forum to discuss the importance of ethical behavior. In addition to defining fraud, this policy can also address how the company intends to respond to fraud and misconduct allegations.

5. Deter & Detect: Response to Fraud Allegations

Regardless of the size of the fraud allegation or the individual involved, the organization should consider having a documented policy of how fraud allegations will be investigated and resolved. The policy would typically include procedures for documentation preservation and evidence gathering. The policy can address which individuals or departments should be responsible, accountable, consulted, and informed depending on the nature of the allegation. Similar to fraud risk assessments, there are many companies that may have certified fraud examiners, attorneys, and certified public accountants on the payroll who may be able to conduct an effective internal

investigation. However, if the amounts involved are potentially material to the financial statements or might involve members of senior management, leading practices would suggest that in many cases the investigation be conducted by independent attorneys and other third-party specialists. In the event that the fraud allegation subsequently gains the interest of the Securities and Exchange Commission or Department of Justice, adherence to this documented policy could be especially helpful.

Unfortunately, fraud is inevitable in many organizations. Internal controls can deteriorate over time, either because of technological advances or human intervention (management override or collusion). The successful implementation of these five anti-fraud controls is not a guarantee that fraud will not occur. Nonetheless, these additions to an organization's control environment can play a significant role in deterring individuals from perpetrating fraud because they often send the message that senior management is committed to preventing and detecting fraud committed against the organization.

2.13. Determinants of Internal Control Measures and Fraud Occurrence

There are several reasons why the internal control measures are conceptualized by banks. Among the reasons include circumvention of the segregation of duties through collusion of staff, management override of controls, human ingenuity and potential human errors caused by work load stress, alcohol, carelessness and distraction (Tunji, 2013). Working conditions can reduce the effectiveness of internal control measures (Njanike et al., 2009). Staff constraints lead to the compromise of the dual control measures and the segregation of duties placed in order to prevent fraud occurrence (Mutesi, 2011). Staff constraints may lead to inadequate management supervision of their juniors hence creating opportunities for the compromise of procedures and collusion among staff (Chiezey & Onu, 2013). Charles (2011) further argues that staff constraints may lead to inadequate checks and poorly done checks hence compromising on the fraud detection measures.

2.14. Empirical Literature Review

Internal control provides many benefits to an entity. It provides management with added confidence regarding the achievement of objectives, provides feedback on how effectively an

entity is operating, and helps reduce risks affecting the achievement of the entity's objectives. Management considers a variety of cost factors in relation to expected benefits when designing and implementing internal controls. The complexity of cost-benefit determination is compounded by the interrelationship of controls with operational processes. Where controls are integrated with operational processes, it is difficult to isolate either their costs or benefits.

Management may decide how an entity evaluates the costs versus benefits of various approaches to implementing an effective internal control system. However, cost alone is not an acceptable reason to avoid implementing internal controls. Management is responsible for meeting internal control objectives. The costs versus benefits considerations support management's ability to effectively design, implement, and operate an internal control system that balances the allocation of resources in relation to the areas of greatest risk, complexity, or other factors relevant to achieving the entity's objectives.

A case study of Nigerian Customs Service on Internal control systems, 2014 concluded that internal Control System are not a substitute for good management, they can assist management but do not replace management or provide an excuse for poor management. Based on the outcome of the five hypotheses which was empirically tested and the research finding the researcher concludes that there should be continuous internal check and audit on the part of management and low level of management to ensure adequate internal control system. Adequate internal control system also ensures proper accountability and the study stated that organizations should provide adequate motivation such as bonuses, incentives to the employees/officers to avoid financial fraud. In addition, effective use of information technology and competent team of experts to work out the logic of standard internal control to enhance the high level of security check would improve the effectiveness of the internal control systems in the organization. (Adewale, 2014)

On the contrary the study made by Tsedal Lemi, January, 2015 concluded that there is no absolute guarantee from internal control that organizations objectives will be achieved. It states that internal control is a responsibility of management, employees and other stakeholders. Hence there should be a clear line of responsibility and structure of reporting to discharge any risk of collusion and fraud. Separation of accounting duty from authorization and custody of an asset is a key in detecting control risk. Thus due emphasis should be given to maintain segregation of

duties. The control system effectiveness should be evaluated against clearly established criteria's and should be monitored continuously. This is the responsibility of management and internal auditors. (Tsedal Lemi, 2015).

Adedoyin (2013) studied the Internal Control measures and the detection and prevention of fraud in banks. Using participants from the Main Street Bank Plc Aba branch in Nigeria and applying descriptive method showed that Internal Control system was significant in detection and prevention of fraud in banks in Nigeria.

Therefore, effective internal controls contribute to better performance by financial institutions. The success of the system depends on positive internal control culture. Banks should have in place a comprehensive internal control management process to identify; measure, monitor and control internal control system effectiveness and compliance. There is also need for financial institutions to cultivate a culture of ethically doing business from the top management which should see this culture cascading down to the most junior worker or employee in the organization so as to promote adherence to internalcontrols of the organization which are essentially management tools on measuring compliance to an organizations way of doing business in a competitive environment. (Kosmas Njanike, 2011)

The study done by Douglas, 2011 considered the control environment, risk assessment, information and communication system, control and monitoring activities as independent variables, and internal control effectiveness as a dependent variable to evaluate the internal control effectiveness in Ecobank Ghana Limited Ashanti Region.

The study carried by Muraleetharan P. 2011 to find out the impact of internal control and performance of the private and public organizations in Jaffna District, Jaffna University was mainly tested by using Chi square test and regression analysis. From obtained from the study, it is apparent that the perceived internal control has a significant impact on financial performance. Control environment and information and communication negatively influence the financial performance. However, the risk assessment, control activities, accounting and communication and monitoring positively influences the financial performance. Since the work performed by the organizations have been implemented in the past and the work schedules take into consideration the goals of internal control, therefore, this will lead to lower control environment of the financial performance. This is because; the necessary proper procedures are already applied in

managing the internal control. However, better performance of risk assessment, control activities and monitoring of the internal control lead to better financial performance.

In addition, the study made by Sultana and Haque (2011) have used authority and working relationship as moderating variables in addition to the five components of internal control.

In the work of Olaniyi O.A (2008) and aligning it with the conclusion made in the works of Fakunle (2006), Robertson (1996) and also in the work of Hamby (1998); bank fraud, according to him are now becoming a global phenomenon. The aftermath of fraud, according to him, causes an embarrassment to the nation and on bank owners, customers and their family members, as most bank failures are associated with large scale frauds. In his conclusion, he was of the emphases that internal control department/unit of any organization is very important in detection and prevention of fraud and cannot be undermined especially by banks. Since the lack of an effective internal control system, according to the he findings is the major cause of bank frauds. It is then concluded that the management of every bank should create and establish a standard internal control system, strong enough to stand against the wiles of fraud in order to promote continuity of operations and to ensure the liquidity, solvency and going concern concept of the bank.

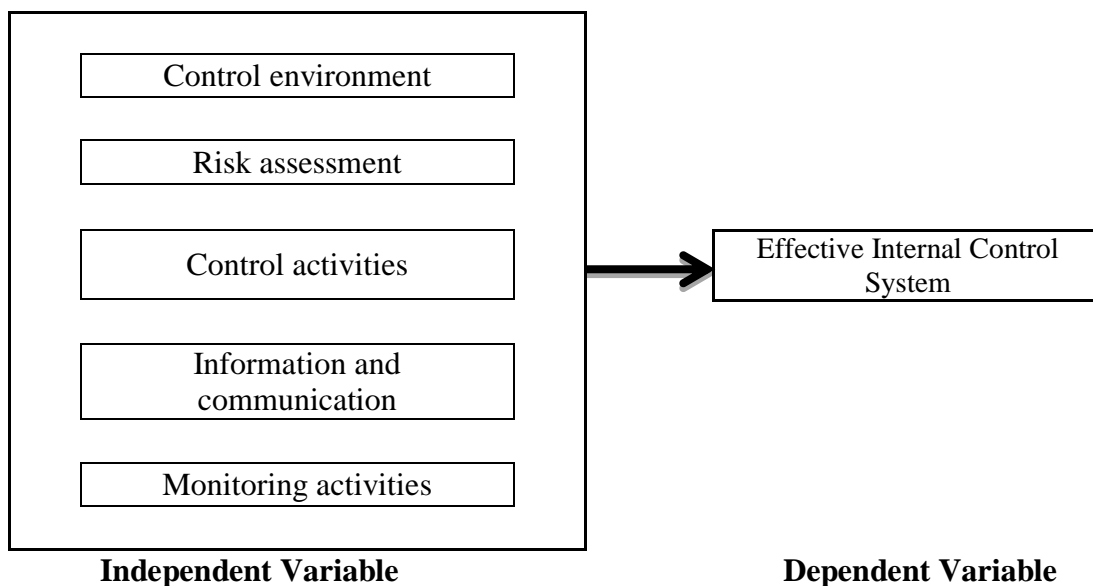
Khanna and Arora (2009) from the Indian environment believes the reason for the rise in fraud profile in the banking industry is because the procedures jointly instituted by the banks and the Reserve Bank were not fully implemented. The paper cites overburdened staff, lack of training and competition as other causes of the fraud. The accounting firms of Ernst and Young (2010) and Deloitte (2015) have attempted to help stem fraud in several ways. Fraud detection or prevention is a function that should be system-wide, but mostly in the realm of internal audit group. Fraud should not go through and be undetected in any accounting year where an effective internal control and audit process are in place.

To this end, all researcher as discussed above they measure the effectiveness of ICS in fraud mitigation they take the five components of ICS as a fixed theory. To say ICS is effective in preventing fraud the ICS by itself must be effective in the first place then after the measurement on fraud prevention and detection shall flow. Therefor the researcher sees this as one of the basic gap to perform this study.

2.15. Conceptual Framework

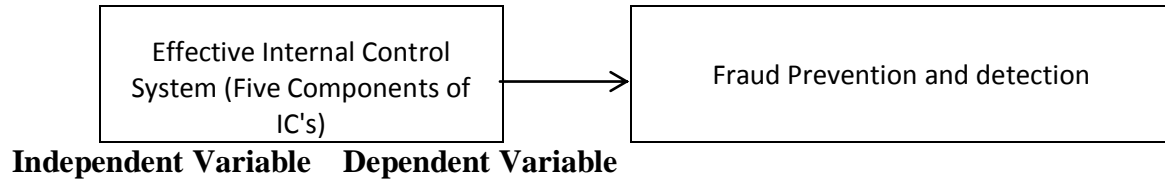
The researcher believes that when evaluating the effectiveness of internal control system in prevention & detection of fraud through effective internal control of the organization the five components of internal control must be considered as essential tools for the study. Thus, the researcher selects fraud prevention and detection as a dependent variable and effective of internal control system through the five components which are control environment, risk assessment, information and communication system, control activities and monitoring as independent variables.

2.15.1. Effectiveness of internal Control based on Internal Control Components



In assessing internal control effectiveness, the evaluator must understand the operations of the five components, the intent of the principles and assumptions underlying the operations of the control components and how they are applied across the organization. The researchers in assessing the effectiveness of the internal control system of Ethiopian banks adopts some of COSO's principles and assumptions of assessing the effectiveness of internal control systems.

2.15.2. The Effectiveness of Internal Control system in fraud Prevention and detection



Chapter Three

Research Methodology

3.1.Introduction

In this chapter; research approach and design, population of the study, sampling techniques and procedures, sample size determination, sources of data and collection method, and methods of data analysis has discussed in details as follows:

3.2.Research design and approach

The study focuses on effectiveness of internal control of Ethiopia Banking industry in ensuring the three internal control objectives which are effectiveness and efficiency of operations, reliability of financial reporting, compliance with applicable laws can reduce risks and detection of fraud effectively.

The researcher used descriptive research design to evaluate effectiveness of internal control in Ethiopian banking industry. Mugenda (2003) indicate that descriptive design is indices that describe a certain sample giving clear information of element without interfering with it. This design will be used to establish the relations that exist between the ICS and fraud control in Ethiopian baking industry. It will also help the researcher to describe the characteristics of variables in the organizations earmarked, gather Information, analyze, summarize and interpret it for the purpose of clarification in a short time. The descriptive design minimizes bias, saves time and money. The other reason behind using descriptive design is because the researcher was interested in describing or assessing the existing situation that found in internal control system of the banks and its level of effectiveness in detecting and preventing of fraud throughout its operations under the study. Also inferential statistics were used in analyzing the data. Inferential statistics involve the use of statistical tools such as correlation analysis & regression analysis through necessary tests.

3.3.Population Sampling Techniques and procedure

The total population of the study was consisting of eighteen banks. From those, nine banks were selected which believed by the researcher to represent the whole population based on the total year of experience in the industry from the date of the establishment.

List of Banks in Ethiopia

No.	Name of Bank	Establishment Year (G.C)
1	Development Bank of Ethiopia	1909
2	Commercial Bank of Ethiopia	1963
3	Awash International Bank S.c	1994
4	Bank of Abyssinia	1996
5	Wegagen Bank S.c	1997
6	United Bank S.c	1998
7	Nib International Bank S.c	1999
8	Dashen Bank S.c	2003
9	Corporative Bank Of oromiya	2005
10	Lion international Bank	2006
11	Oromiya International Bank	2008
12	Zemen Bank S.c	2009
13	Bunna International Bank	2009
14	Birhan International Bank S.c	2010
15	Abay Bank S.c	2010
16	Addis International Bank	2011
17	Debube Global Bank S.c	2012
18	Enat Bank	2013

Source: NBE web page

Table 1. Total population of the study

The target respondents were who are those Senior Internal control department Staffs in the respective selected banks. Purposive sampling technique was used to select the key informants who are the internal Control staffs, Internal Auditors and Departmental Heads. This research method was employed because the targeted internal control staffs and head of this department will have access to vital information, experience and professional skills that was necessary and relevant for the study. Due to their position of responsibility they have a better understanding of internal controls in relation to its effectiveness in detecting fraud.

In order to obtain the optimum sample size, the researcher employed Kerlinger's method of determining sample size. According to Kerlinger (1983), a sample is representative of the total population if it ranges between 10%-30% of the total population. Therefore from the population

of 18 banks, 9 banks were selected which is 50% of the total population which is acceptable according to Kerlinger.

No.	Name Of Bank	Distributed Questionnaires'	Returned Questionnaires'	Returned %
1	Development Bank of Ethiopia	20	20	100%
2	Commercial Bank of Ethiopia	30	24	80%
3	Awash International Bank S.c	25	21	84%
4	Bank Of Abyssinia	22	17	77%
5	Wegagen Bank S.c	20	18	90%
6	United Bank S.c	15	12	80%
7	Nib International Bank S.c	19	15	79%
8	Dashen Bank S.c	18	18	100%
9	Corporative Bank Of oromiya	16	15	94%
	Total	185	160	86%

Table 2 Sample Size of Respondents

3.4. Source of Data and Collection Method

For the ultimate goal of the study; the researcher used primary source of data which collected questionnaires from the selected respondents of the related bank officials/managers who work in the selected banks. The variables were measured using Likert scale with five response categories (strongly agree, agree, neutral, disagree and strongly disagree). The questionnaires were used as they were easy to administer and to save time. The questionnaires were designed in a way that the respondents were required to tick the appropriate answer according to their assessment based on Likert scale. The researcher prepared a list of questions based on the research objectives in order to solicit information from the target population.

The questionnaire has three sections; Section 1 deals with demographic information such as sex, educational background, age distribution and working experience. Section 2 sought information on effectiveness of internal control system through components of ICS in the organization. Section 3 was evaluate/measure how effective internal control affects detection and prevention of fraud activity.

3.5. Method of Data Analysis

The method of data analysis used for this study were descriptive statistical method where tables and simple percentages is used to analyze the information in the questionnaire supplied by the

respondents so as to allow accuracy and easy decoding of information. Collected data were analyzed through descriptive and inferential statistical techniques using Statistical Package for Social Sciences (SPSS) software package and interpretative explanations. Qualitative explanations were in place of quantitative data to give meaning to them as well as explain their implications. And on this basis the discussion of findings made.

Chapter Four

Data Analysis, Presentation and Interpretations

This chapter presents the analysis and discussions for the research findings obtained from the questionnaires. The study wanted to establish the relationships between the effective ICS and fraud prevention and detection in Ethiopian Banking industry.

It reports the investigation results obtained from the responses; those were identified target samples across the bank working within different processes at various capacities.

First the chapter presents effectiveness of internal control system in Ethiopian banking industry using of some simple descriptive statistics because the researcher need to determine how fraud is prevented and detected through effective internal control system. So to do this the effectiveness of ICS in Ethiopian banking industry should be discussed in the first place. Next to this, as the study wanted to establish the relationships between effective ICS and fraud prevention and detection the diagnostics test results of multicollinearity, heteroscedasticity and normality follow. The chapter also presents results of the regression analysis and discusses the study results. The chapter is concluded by a summary of the chapter. The following are results derived from the analysis of data collected from the respondents.

4.1.Respondents Profile

4.1.1. Gender &Age Distribution

Out of 160 respondents 57.5% were male and 42.5% are female as indicated on table 3. These distributions showed that both male and female were represented in the study as shown below.

Table 3Descriptive Statistics of Gender of respondents

		Sex			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	92	57.5	57.5	57.5
	Female	68	42.5	42.5	100.0
Total		160	100.0	100.0	

Source: Questionnaires and SPSS output (2017)

For the age distribution of respondents as shown below 10.6% of the respondents falls within the age bracket of 20-27yrs, 62.5% falls within 28-35yrs which is the higher age distribution of respondents.18.8% falls within 36-40yrs and 2.5% falls within the age of 41-55yrs and the remaining 5.6% were above 56.

Table 4Descriptive Statistics of Age of respondents

		Age			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 - 27 yrs	17	10.6	10.6	10.6
	28 - 35 yrs	100	62.5	62.5	73.1
	36 - 40 yrs	30	18.8	18.8	91.9
	41 - 55 yrs	4	2.5	2.5	94.4
	Above 56 yrs	9	5.6	5.6	100.0
	Total	160	100.0	100.0	

Source: Questionnaires and SPSS output (2017)

4.1.2. Education & Work Experience

The analysis of this variable revealed that the majority of respondents (60 %) have both first degree and 40% has master's degree. This result indicates that the bank industry has skilled man power and it also increases the response rate for the study.

Table 5.Descriptive Statistics of Education background of respondents

		Education			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BA	96	60.0	60.0	60.0
	MA/MSC	64	40.0	40.0	100.0
	Total	160	100.0	100.0	

Source: Questionnaires and SPSS output (2017)

Year of service/experience of the respondents in the bank has been assessed and indicated in table 6. Majority of the respondents 61.3% have experience of 6 to 10 years and 18.1% have 11 to 15 years' experience.5% of the respondent has 1 to 5 & 16 to 20 years' experience

respectively. The remaining 10.6% respondents have above 21 years' experience in the bank. This indicates that majority of the respondents have 6 to 15 years' experience with in the bank.

Table 6 Descriptive Statistics of Experience of respondents

		Year of service in the bank			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 -5 yrs.	8	5.0	5.0	5.0
	6 -10 yrs.	98	61.3	61.3	66.3
	11 -15 yrs.	29	18.1	18.1	84.4
	16 -20 yrs.	8	5.0	5.0	89.4
	Above 21 yrs	17	10.6	10.6	100.0
	Total	160	100.0	100.0	

Source: Questionnaires and SPSS output (2017)

4.2. Measuring Effectiveness of Elements of Internal Control

4.2.1. Control Environment

This part of the study sought to assess the effectiveness of the control environment in Ethiopian banking industry as shown in Table 7. The results showed that it must be emphasized that all the items reported under the control environment had mean scores between 3.08 and 3.86. This means that the majority of the respondents were of the view that the control environment component of the internal control systems is effective. The overall mean of the control environment can be approximated to 3.6 which indicate an agreement in practices of control environment but rooms for improvement.

The highest mean 3.86 indicates that majority of respondents agreed that there is a clear separation of roles and responsibility in the bank. In an effective control environment, a separation of roles has to obtain company objective. The result of the survey is also in line with this theory which is indicated by mean value of 3.37. This means majority of the respondents agreed that the clear line of responsibility enables achievement of objectives. The table also indicated that it can't be said the control environment of the bank is not effective or effective in awareness of guidelines of operation. The least mean 3.08 indicates that majority of the respondents are neutral to evaluate this variable.

Table 7.Descriptive Statistics of effectiveness Control Environment

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
There is clear separation of roles and responsibilities in the bank	160	2	5	3.86	.808
All employees in charge of the banks operations are aware of the guidelines of the operation	160	1	4	3.08	.908
All staff in charge perform their responsibilities as per the regulations and guidelines	160	2	4	3.35	.746
The control environment in your bank is enough to attain the bank's objectives	160	2	4	3.37	.814
Control_environment_IC	160	2	4	3.58	.659
Valid N (listwise)	160				

Source: Questionnaires and SPSS output (2017)

4.2.2. Risk Assessment

Risk assessments become an integral part of internal control system. The management is responsible to identify and assess control risk caused by failure of internal control. There should be strategies of identifying Risk, system to respond to risk and reduce the risk. The survey results and analysis on this issue is presented as follows.

This variable was investigated to find out how the banking sector identify, analyses and manage risk that are related to the overall bank operation activity. This covered whether the organization the organization designed appropriate strategies for identification of risk, whether employees are represented in setting organizational objectives in related to risk occurrence and response.

From the table it shows there was no employee strongly disagreed that there exists appropriate strategy of identifying risks (Min 2 and Max 5). Thebanks have to made some improvements on designing of appropriate system to offer appropriate response to risk (>3.5 mean which is 3.38). To mention some of the measures Changes in operating environment, new personnel, rapid

growth, new lines, product & activities, corporate restructuring, foreign operation, accounting pronouncements are some of the basic ones.

The overall risk assessment can be approximated to a mean of 3.5 which show there is effective risk assessment on ICs of Ethiopians banks.

Table 8 Descriptive Statistics of effectiveness of Risk Assessment

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
The bank has designed an appropriate strategy of identifying risks.	160	2	5	3.56	.815
The bank designed a system to offer appropriate response to risks	160	2	5	3.38	.931
Involvement of the internal control staff during implementation reduces the occurrence of risk.	160	2	5	3.99	.469
Risk_assessment_IC	160	2	5	3.63	.660
Valid N (listwise)	160				

Source: Questionnaires and SPSS output (2017)

4.2.3. Control Activity

Control activities include methods as preparation of reliable reports: update documentation, authorization of transactions, independent review and others. The result of the survey indicated in the table below shows that the overall degree of agreement ranged from 3 to 5 by respondents in all criteria of control activities. The Overall mean of the control activities for the four questions can be estimated to 3.95 which is the respondent are in agreement about their effective control activity in their respective banking industry.

The highest mean 4.25 indicated on table 9 confirm that majority of respondents agree that the bank invoices or request for disbursements are backed by appropriate supporting documents. Subsequently mean of 4.16 indicated on the table also indicate that majority agree that the bank has effective authorization; processing cheque signing and accounting function are clearly segregated.

Table 9 Descriptive Statistics of effectiveness of Control Activity

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Authorization, processing, cheque signing and accounting functions are clearly segregated.	160	2	5	4.16	.456
The bank invoices or requests for disbursements are backed by appropriate supporting documents	160	3	5	4.25	.449
There is an up-to-date asset register	160	1	5	3.18	.784
The procurement and disposal of assets procedure is strictly followed under the bank operation systems.	160	1	5	3.06	.863
Control_activities_Ic	160	3	5	3.95	.524
Valid N (listwise)	160				

Source: Questionnaires and SPSS output (2017)

4.2.4. Information and Communication

The respondents relatively agreed that the communication helps to evaluate how well the guidelines of the banks are working. The survey result mean 3.44 indicates that respondents in this element of information and communication degree of agreement varied with standard deviation of 0.94. The highest degree of variation also occurred between respondents on a clear understanding of the consequence of illegal activity by stakeholders by standard deviation of 1.02. but in general the overall effectiveness of information and communication on ICs of Ethiopian banks can said effective through mean value of 3.73.

Table 10.Descriptive Statistics of effectiveness of Information and communication

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Control information's are communicated to all stakeholders	160	1	5	3.44	.943
Transactions are promptly recorded and classified to provide reliable information	160	3	5	4.13	.374
The officer's responsibility and the right to access are clearly communicated	160	2	5	3.75	.561
The consequences of illegal activities are clearly understood by the stakeholders	160	2	5	3.51	1.028
Information_and_communication_IC	160	3	5	3.73	.624
Valid N (listwise)	160				

Source: Questionnaires and SPSS output (2017)

4.2.5. Monitoring Activity

An ongoing monitoring of internal control is vital to ensure whether internal control is achieving desired objectives. According to Coffin (2003) monitoring entails the activities and procedures designed to assess the effectiveness of the internal control system in achieving the entity's financial reporting objectives. The result and interpretation of the survey is presented as follows.

An estimated overall mean of monitoring components indicates that there is effective monitoring activity on internal control system of Ethiopian banking industry as shown mean value of 3.96 which can be approximated to 4. In the majority of monitoring criteria's practices the respondent's minimum degree of agreement is 3 and maximum of 5. This implies that there were few respondents disagreed with the practices of monitoring in the bank and majority are strongly agreed to believe that there is effective monitoring activity on internal control system in their respective banks.

Table 11.Descriptive Statistics of effectiveness of monitoring activity

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
The bank has monitoring activities in relation to operational activities.	160	2	5	3.87	.655
Monitoring the internal control system of the bank is important to achieve the bank objectives.	160	4	5	4.43	.496
Monitoring helps to determine whether controls under the bank are effective.	160	3	5	4.19	.678
Internal control monitoring activities of the bank could reduce the occurrence of fraud and illegal activities.	160	2	5	4.23	.552
Appropriate actions are applied based on control findings and recommendations.	160	2	5	3.71	.648
Monitoring_activities_IC	160	3	5	3.96	.370
Valid N (listwise)	160				

Source: Questionnaires and SPSS output (2017)

4.2.6. Effectiveness of Internal Control system

The control environment of the bank is found in a better position to achieve the bank's objectives. In addition, the bank operational activities are guided by its policies and procedures in order to produce reliable financial reports. The control environment has the set of standards, processes, and structures that provide the basis for carrying out internal control across the organization. The banks management has significant roles regarding the importance of internal control including expected standards of conduct

The study results indicate that strong controls exist in the control activity and monitoring activities components of the internal control systems of banks in Ethiopian. The two components were highly rated by respondents with average means of 3.95 and 3.96 respectively. The study

particularly revealed a very strong tone at the top, indicating the board of director's commitment to integrity and ethical values. This is in the right direction in curbing what Roger Steare called a systemic deficit in ethical values in the banking industry. In line with the above, Risk Assessment is considered as a key part of management process which is in place to identify and assess barriers to achieving Bank's objectives.

The banks designed strategy to identify risks and appropriate response to risks are the areas that 49% and 42% respondents respectively were agreed on. However, as per the responses rate this risk assessment area have shown some inefficiencies or gaps. Above half of the respondents were agreed on the banks managements role in identifying, evaluating and responding to risks. Therefore, the banks managements have significant role in risk assessment process of the bank in line with the internal control staff's involvement during operational activities and implementations in order to control and reduce the occurrence of risks.

In order to reduce illegal activities, punishments and consequences of such activities should clearly communicate to all stakeholders. However, among the selected respondents 36% of them were unaware or neutral to the existing appropriate communication systems for consequences of illegal practices. Therefore, the information and communication systems of internal control of the banks have shown some weaknesses or gaps.

Table 12 Descriptive Statistics of effectiveness of ICs

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Control_environment_IC	160	2	4	3.58	.659
Risk_assessment_IC	160	2	5	3.63	.660
Control_activities_IC	160	3	5	3.95	.524
Information_and_communication_IC	160	3	5	3.73	.624
Monitoring_activities_IC	160	3	5	3.96	.370
Effectiveness_of_IC	160	3	5	3.87	.436
Valid N (listwise)	160				

Source: Questionnaires and SPSS output (2017)

Overall, from the results, it is important to mention that all the components of internal control system are highly rated. As shown below the effectiveness of internal control is summarized with

mean value of 3.87 which can be approximated to value of 4. Therefore to end this majority of respondents are agreed on the components of internal control are effective in their respective bank. This can help us to conclude that Ethiopian banking industry has effective internal control system with mean of 3.87 and SD of 0.44.

4.3.Descriptive Statistics

This section presents the descriptive statistics of dependent and explanatory variables used in this study on the second conceptual frame work. The dependent variable used in this study was fraud detection and prevention while explanatory variables were effectivecontrol environment, effective risk assessment, effective control activities, effective information & communication and effective monitoring activities.

Table 13 shows the summary descriptive results for all the variables used in the study such as mean, maximum, minimum, standard deviation, skewness, kurtosis and number of observation.

Table 13 Descriptive Statistics of variables

	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std.	Skewness		Kurtosis	
					Deviation Statistic	Statistic	Std. Error	Statistic	Std. Error
Effective_Control_environment	160	2	5	3.93	0.630	-1.318	0.192	3.343	0.381
Effective_Risk_assessment	160	3	5	3.91	0.378	-0.930	0.192	3.365	0.381
Effective_Control_activities	160	3	5	4.15	0.552	0.064	0.192	0.070	0.381
Effective_Information_and_comm unication	160	3	5	3.93	0.442	-0.363	0.192	1.973	0.381
Effective_Monitoring_activities	160	3	5	4.02	0.441	0.093	0.192	2.261	0.381
Fraud_Detection_and_Prevention	160	3	5	3.96	0.387	-0.365	0.192	3.749	0.381

Source: Questionnaires and SPSS output (2017)

The data consisted of 160 observations measured on six variables. The researcher conducted descriptive statistics on the overall sample and frequencies and percentages for categorical variables. The study conducted on explanatory variables revealed that the mean score value for the effective control environment, effective risk assessment, effective control activities, effective information & communication and effective monitoring activities in average was 3.93 (SD=.630), 3.91 (SD=.378), 4.15 (SD=.552), 3.93 (SD=.442), and 4.02 (SD=.441) respectively

which falls on agree agreement. In regard to fraud detection and prevention, the mean score value for the category in average was 3.96 (SD=.387) which falls on an agree. Therefore. for almost all the variables, the mean value lies within their maximum and minimum values showing a good level of consistency.

4.4. Reliability Analysis

Reliability actually a tool to measure a questionnaire which is an indicator of the variables or constructs. Questioner said to be reliable or reliable if answer a person to questions are consistent or stabilized over time. In conducting the reliability test using SPSS version 20.0 for windows. The researcher calculated Cronbach’s alpha values for the items in each construct. The coefficients were evaluated using the guidelines suggested by George and Mallery (2010), where values 0.9 or higher indicate excellent reliability, values ranging from 0.8 to .89 indicate good reliability, values ranging from 0.7 to .79 indicate acceptable reliability, values ranging from 0.6 to .69 indicate questionable reliability, values ranging from 0.5 to .59 indicate poor reliability, and values less than 0.5 indicate unacceptable reliability. As indicated below in Table 14 below the value for Cronbach’s Alpha (α) was 0.771 for all items which exceed 0.70 the accepted value for Cronbach’s Alpha George and Mallery (2010). In short nut, the responses generated for all of the variables used in this research was reliable enough for data analysis. This value was acceptable based on the rule of George and Mallery (2010).

Table 14 Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.771	0.774	6

Source: Questionnaires and SPSS output (2017)

4.5. Correlation Analysis

The next purpose of this study is to perform Pearson correlation between fraud detection and prevention and explanatory variables i.e. effective control environment, effective risk assessment, effective control activities, effective information & communication and effective monitoring activities. The results of this test are presented in Table 15.

Table 15 Correlation Matrix (with dependent Variables)

		Effective Control environment	Effective Risk assessment	Effective Control activities	Effective Information and communication	Effective Monitoring activities	Effective Fraud Detection and Prevention
Effective Control environment	Pearson Correlation	1					
	Sig. (2-tailed)						
Effective Risk assessment	Pearson Correlation	.210**	1				
	Sig. (2-tailed)	0.008					
Effective Control activities	Pearson Correlation	.394**	0.123	1			
	Sig. (2-tailed)	0.000	0.120				
Effective Information and communication	Pearson Correlation	.318**	0.148	.330**	1		
	Sig. (2-tailed)	0.000	0.061	0.000			
Effective Monitoring activities	Pearson Correlation	.526**	.161*	.376**	.330**	1	
	Sig. (2-tailed)	0.000	0.043	0.000	0.000		
Fraud Detection and Prevention	Pearson Correlation	.737**	0.106	.528**	.425**	.742**	1
	Sig. (2-tailed)	0.000	0.181	0.000	0.000	0.000	
	N	160	160	160	160	160	160

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Questionnaires and SPSS output (2017)

The result presented in the Table 15 outlined the correlation matrix among the variables. Correlation is a way to index the degree to which two or more variables are associated with or related to each other. The chief objective is measuring the strength or degree of linear relationship between two variables. As noted by (Gujarati, 2004), most widely used bi-variant correlation statistics is the Pearson product-movement coefficient, commonly called the Pearson correlation which was used in this study. Correlation coefficient between two variables ranges from +1 (i.e. perfect positive relationship) to -1 (i.e. perfect negative relationship). The sample size is the key element to determine whether or not the correlation coefficient is different from zero/statistically significant.

As depicted in Table 15 above the correlation between the independent and dependent variables were not high. Fraud detection & prevention and effective monitoring activities have highest correlation coefficient which is 0.742 at 0.01 level of significant. This result shows that fraud detection and prevention and of commercial banks ICS have significant relationship with the level of effective monitoring activities. Fraud detection & prevention and effective control environment has the second highest correlation coefficient (0.737) next to effective monitoring

activities at 0.01 level of significant. Effective control activities, effective information & communication and effective risk assessment has correlation coefficient of 0.528, 0.425 and 0.106 respectively at 0.01 level of significant.

4.6.Econometric Analysis

The researcher conducted diagnostic tests to guard against the possibility of obtaining and interpreting spurious regression results. The results of the tests are presented in the following sections.

4.6.1. Multicollinearity Test

The result of the test for existence multicollinearity between independent variable are presented in the correlation analysis using only independent variables in the below table:

Table 16 Correlation Matrix (Only Independent Variables)

		Effective Control environment	Effective Risk assessment	Effective Control activities	Effective Information and communication	Effective Monitoring activities
Effective Control environment	Pearson Correlation	1				
	Sig. (2-tailed)					
Effective Risk assessment	Pearson Correlation	.210**	1			
	Sig. (2-tailed)	0.008				
Effective Control activities	Pearson Correlation	.394**	0.123	1		
	Sig. (2-tailed)	0.000	0.120			
Effective Information and communication	Pearson Correlation	.318**	0.148	.330**	1	
	Sig. (2-tailed)	0.000	0.061	0.000		
Effective Monitoring activities	Pearson Correlation	.526**	.161*	.376**	.330**	1
	Sig. (2-tailed)	0.000	0.043	0.000	0.000	
	N	160	160	160	160	160

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: Questionnaires and SPSS output (2017)

As noted by (Gujarati, 2004), a serious problem for multicollinearity is occurred if the correlation is about 0.8 or larger. I.e. if pair-wise or zero-order correlation coefficient between two regresses is out of the recommended range of multicollinearity which is -0.8 or 0.8. In the above correlation matrix there is no pair-wise relation that exceeds 0.8 which suggests for not

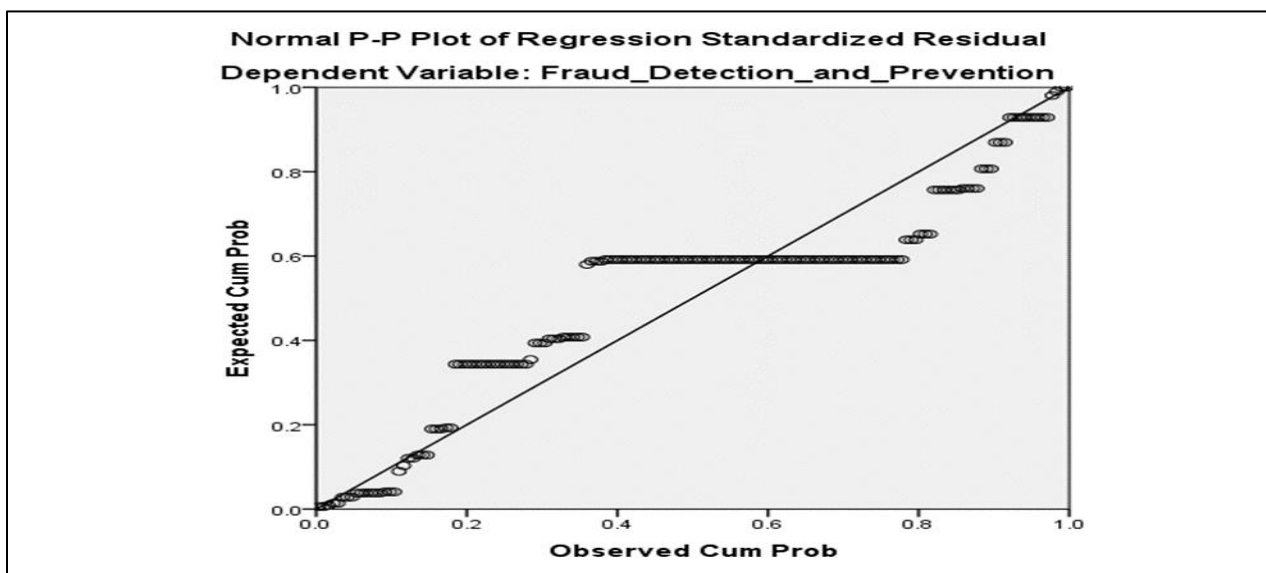
rejecting the null hypothesis (H_0) which states that there is no perfect pair-wise relation among regressors.

The results in the above correlation matrix table shows that the highest correlation of 0.526 which is between effective monitoring activities and effective control environment. Since there is no correlation above 0.8 in this study according to Cooper and Schendlar (2009), it can be concluded in this study that there is no problem of multicollinearity, thus enhanced the reliability for regression analysis. Therefore, it can be concluded that in this study that there is no problem of multicollinearity or the results showed that the problem of multicollinearity did not exist between variables in the model. Hence all the variables were retained for use in the estimations.

4.6.2. Linearity Test

Linearity refers to the degree to which the change in the dependent variable is related to the change in the independent variables. To determine whether the relationship between the dependent variable:frauddetection &prevention and explanatory variables: effectivecontrol environment, effective risk assessment, effective control activities, effective information & communication and effective monitoring activities is linear; plots of the regression residuals through SPSS software had been used.

Figure 1Normal Point Plot of Standardized Residual



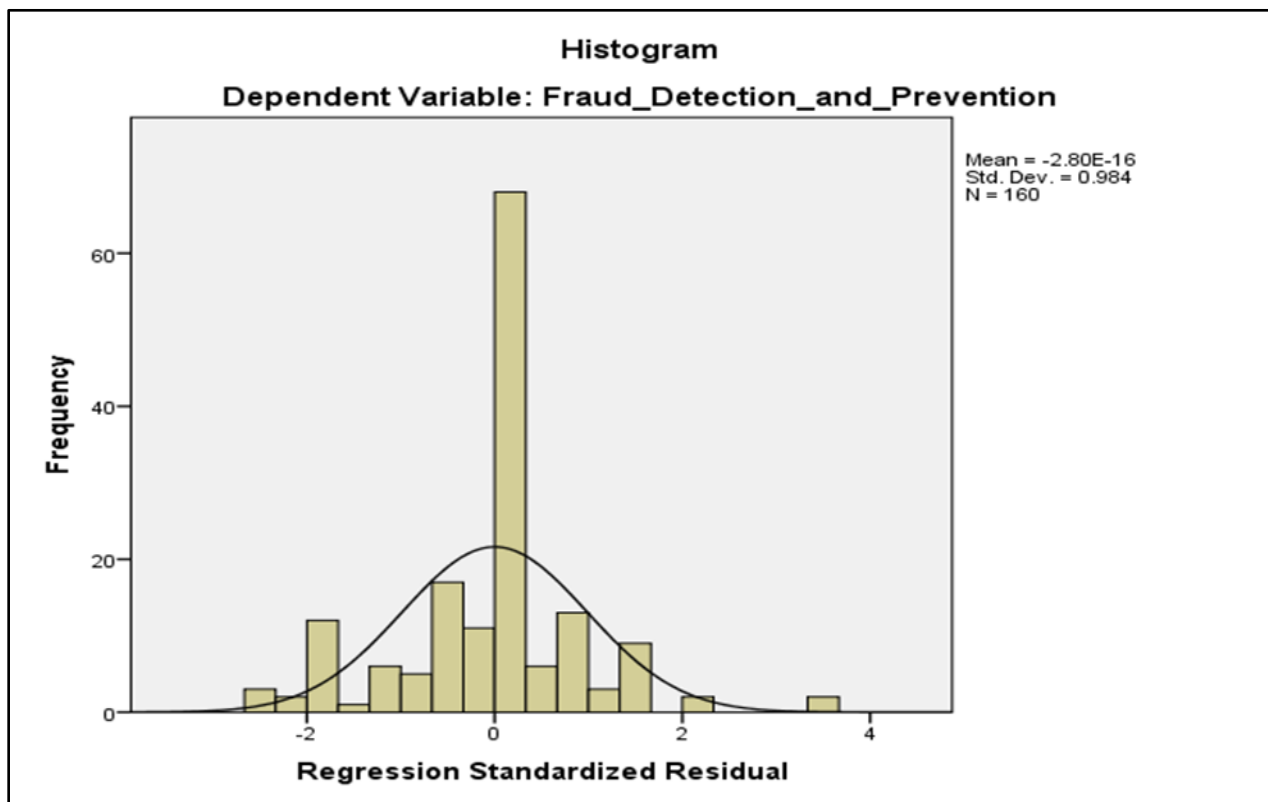
Source: Questionnaires and SPSS output (2017)

The scatter plot of residuals shows no large difference in the spread of the residuals as you look from left to right on figure 1. This result suggests the relationship we are trying to predict is linear. Similarly, the above figure shows the normal distribution of residuals around its mean of zero. Hence the normality assumption is fulfilled as required based on the above figure, it is possible to conclude that the inferences that the researcher will made about the population parameter from the sample is valid.

4.6.3. Normality Test

Figure 2 shows the frequency distribution of the standardized residuals compared to a normal distribution. As you can see, although there are some residuals (e.g., those occurring around 0) that are relatively far away from the curve, many of the residuals are fairly close. Moreover, the histogram is bell shaped which lead to infer that the residual (disturbance or errors) are normally distributed. Thus, no violations of the assumption normally distributed error term.

Figure 2 Frequency Distribution of Standardized Residual



Source: Questionnaires and SPSS output (2017)

Thus, from an examination of the information presented in all the three tests the researcher concludes that there are no significant data problems that would lead to say the assumptions of classical linear regression have been seriously violated.

4.7. Regression Analysis

A regression analysis was conducted using control systems variables as a predictor of the direction and influence of control systems on fraud detection and prevention in Ethiopian Banking industry. The study tested the following hypotheses:

H₀₁: There is no significant relationship between control environment and fraud control in Ethiopian Banking industry.

H₀₂: There no significant relationship between risk assessment and fraud control in Ethiopian Banking industry.

H₀₃: There is no relationship between control activity and fraud control in Ethiopian Banking industry.

H₀₄: There is no relationship between information and communication and fraud control in Ethiopian Banking industry.

H₀₅: There no significant relationship between monitoring and fraud control in Ethiopian Banking industry.

The hypotheses formulated above have been tested empirically by employing regression model. The regression model is as follows:

Operational model: the operational linear regression model used to find the statistically significant fraud prevention & detection (FPD) on the components of internal control in the case commercial Bank is depicted here below:

$$FPD = \alpha_i + \beta_1 * CE + \beta_2 * RA + \beta_3 * CA + \beta_4 * IC + \beta_5 * MA \dots \dots \dots (4.1)$$

Where: $\beta_1, \beta_2, \beta_3, \beta_4,$ and β_5 represents effective control environment (CE), effective risk assessment (RA), effective control activities (CA), effective information & communication (IC)

and effective monitoring activities (MA) as components of internal control respectively and Y represent Indicators of fraud prevention & detection(FPD).

4.7.1. Overall regression model and its ANOVA

A. Regression model Summery

The regression summery is summarized as follows:

Table 17Regression model Summery

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.872 ^a	0.761	0.753	0.192	2.259

a. Predictors: (Constant), Effective_Monitoring_activities, Effective_Risk_assessment, Effective_Information_and_communication, Effective_Control_activities, Effective_Control_environment

b. Dependent Variable: Fraud_Detection_and_Prevention

Source: *Questionnaires and SPSS output (2017)*

R-squared measure the goodness of fit of the explanatory variables in explaining the variations in fraud prevention & detection(FPD)in Ethiopian Banking industry measures of explanatory variables Predictors: (Constant), effective control environment (CE), effective risk assessment (RA), effective control activities (CA), effective information & communication (IC) and effective monitoring activities (MA) as components of internal control. As clearly described in Table 17 adjusted R-square value for the regression model was 0.753, this indicates the explanatory variables in this study explain about 75.3 percent of the variation in the level of fraud prevention & detectioninEthiopian Banking industry. The remaining 24.7 percent of the variation in the level of fraud prevention & detectioninEthiopian Banking industry are explained by other variables which are not included in the model.

B. Analysis of Variance

The study conducted an analysis of variance, in order to test the impact of the relationship between internal controls and fraud prevention & detection of Ethiopian Banking industry. The findings were as shown below:

Table 18 Regression-ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.098	5	3.620	98.194	.000 ^b
	Residual	5.677	154	0.037		
	Total	23.775	159			

a. Dependent Variable: Fraud_Detection_and_Prevention

b. Predictors: (Constant), Effective_Monitoring_activities, Effective_Risk_assessment, Effective_Information_and_communication, Effective_Control_activities, Effective_Control_environment

Source: Questionnaires and SPSS output (2017)

From the ANOVA test in table 18 it shows the Sig. value 0.01 is greater than the calculated Sig. value 0.000. It reflects there was a statistically significant correlation between dependent variable and independent variables at 1% significant level. Which means the explanatory variables; effective control environment (CE), effective risk assessment (RA), effective control activities (CA), effective information & communication (IC) and effective monitoring activities (MA) as components of internal control have great contribution to improve fraud prevention & detection(FPD)level. But it does not mean that all these factors of fraud prevention & detection(FPD)have equally significant correlation with components of internal control level. The results of the linear regression analysis signal that there is variation in the effect of fraud prevention & detection(FPD) on components of internal control. Beside the F statistics (98.194) which is used to measure the overall test of significance of the model was presented, and null hypothesis can be clearly rejected since the p-value is 0.000 which is sufficiently low, the model is well fitted at 1 percent level of significance.

C. Test for Coefficients

This table shows the level of significance on the variables, it also provides the standardized and unstandardized coefficients are shown below:

Table 19 Regression Coefficient Analysis of the Model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	0.911	0.216		4.215	0.000		
Effective Control environment	0.263	0.030	0.428	8.800	0.000	0.657	1.523
Effective Risk assessment	-0.091	0.041	-0.089	-2.207	0.029	0.946	1.057
Effective Control activities	0.122	0.031	0.174	3.882	0.000	0.773	1.294
Effective Information and communication	0.089	0.038	0.102	2.354	0.020	0.823	1.214
Effective Monitoring activities	0.379	0.042	0.432	8.992	0.000	0.672	1.489

a. Dependent Variable: Fraud Detection and Prevention

Source: Questionnaires and SPSS output (2017)

From the above table 19, the researcher sought to establish the extent to which internal control impact on fraud prevention & detection of Ethiopian Banking industry. The following regression equation was obtained:

$$FPD = 0.911 + 0.263 * CE - 0.091 * RA + 0.122 * CA + 0.089 * IC + 0.379 * MA \dots \dots \dots (4.2)$$

From the above regression model holding all the other factors constant, the level of fraud prevention & detection is measured by the efficiency and effective implementation of internal controls. The results of the multiple regression model show in the following section.

4.8. Discussion and Interpretation of Findings

I. Control Environment (CE) vs. Fraud Prevention & Detection(FPD)

For the control environment variable, its coefficient suggests a positive impact on fraud prevention & detection(FPD). Thus, for a one-point increase in the control environment variable, the probability of the Ethiopian Banking industry being in fraud prevention & detection(FPD) variable would increase by 0.263 while the other variables in the model are held constant. The impact of control environment on fraud prevention & detection(FPD) remains significance given a p-value lower than 0.05 (p-value = 0.000). Simply put, control environment has significant impact in fraud prevention & detection(FPD) among Ethiopian Banking industry.

Therefore, we reject the null hypothesis that there is no significant relationship between control environment and fraud prevention & detection(FPD)in Ethiopian Banking industry. Therefore, we accept alternative hypothesis and conclude that there is significant relationship between control environment and fraud prevention & detection in Ethiopian Banking industry. These observation shows that the control environment putin place by the Ethiopian Banking industry controls fraud. The study results are in agreement with findings of Mawanda(2008) which indicated that there is positive relationship between control environment and fraud prevention & detection.

II. Risk Assessment (RA) vs. Fraud Prevention & Detection(FPD)

Ethiopian Banking industry with a higher score of risk assessment tend to achieve significantly lower fraud prevention & detection given a negative coefficient and with a p-value of 0.029. That is, for a one-point increase in risk assessment, results in a 0.091 decrease in fraud prevention & detection while the other variables in the model are held constant. In other words, there is a negative relationship between conducting risk assessment and fraud prevention & detection among Ethiopian Banking industry in Ethiopia.

The impact of risk assessment on the level of fraud prevention & detection(FPD) remains significance given a p-value lower than 0.05 (p-value = 0.029). Simply put, risk assessment has significant impact in fraud prevention & detection(FPD) among Ethiopian Banking industry;hence the null hypothesis that there is no significant relationship between risk assessment and fraud prevention & detection in Ethiopian Banking industryis rejected. Therefore, we accept alternative hypothesis and conclude that there is significant relationship between risk assessment and level of fraud prevention & detection in Ethiopian Banking industry. This shows that the risk assessment applied in these Ethiopian Banking industry work in controlling fraud. This is in tandem with the findings of Tunji (2013) who concluded that proper risk assessments can be used to reduce financial distress in banking industry brought about by errors and fraud.

III. Control Activities vs. Fraud Prevention & Detection(FPD)

The results also indicate that there is a positive and significant relationship between control activity and level of fraud prevention and detection. This finding was supported by a regression

coefficient of 0.122 and a p value of 0.000. The reported p value was less than the critical p value of 0.05. A regression coefficient of 0.122 implies that a one unit increase in control activity leads to a 0.122 unit increase in level of fraud prevention and detection among the sampled Commercial Banks.

The impact of control activity on the level of fraud prevention & detection remains significance given a p-value lower than 0.05 (p-value = 0.000). Simply put, control activity has significant impact in the level of fraud prevention & detection among Ethiopian Banking industry; hence the null hypothesis that there is no significant relationship between control activity and fraud prevention & detection in Ethiopian Banking industry is rejected. Therefore, we accept alternative hypothesis and conclude that there is significant relationship between control activity and level of fraud prevention & detection in Ethiopian Banking industry. This shows that the control activity applied in these Ethiopian Banking industry work in controlling fraud.

IV. Information and Communication (ICM) Vs. Fraud Prevention & Detection (FPD)

With a positive coefficient of 0.0581276, Ethiopian Banking industry with information and communication systems tend to record high fraud prevention & detection. However, the positive effect of information and communication system on fraud prevention & detection of Ethiopian Banking industry remained significant given a p-value greater than 0.05 (p-value=0.020). In other words, information and communication system is a positive predictor of level of fraud prevention & detection, and significant impact.

The null hypothesis that there is no significant relationship between information and communication and level of fraud prevention & detection in Ethiopian Banking industry is rejected. Therefore, we accept alternative hypothesis and conclude that there is significant relationship between information and communication and fraud prevention & detection in Ethiopian Banking industry. These results show that information and communication play an important role in fraud control. Tunji (2013) agrees that timely, current and accessible information and communication can be effectively used to avert any form of financial misapplication or misuse.

V. Monitoring Activities (MA) Vs. Fraud Prevention & Detection (FPD)

The monitoring activity variables tend to have significantly positive coefficients of 0.379 with p-values of 0.000. The variables with positive significant coefficients are positive correlates of level of fraud prevention & detection among the sampled commercial Banks. For a one-point increase in monitoring activities results in 0.379 unit increase in the level of fraud prevention & detection. That is to say, In Ethiopian Banking industry commercial banks with effective systems of monitoring activities tend to maximize fraud prevention & detection.

The null hypothesis that there is no significant relationship between monitoring and fraud prevention & detection in Ethiopian Banking industry is therefore rejected and alternative hypothesis is accepted. This means that there is significant relationship between monitoring and fraud prevention & detection in Ethiopian Banking industry. These findings indicate that the monitoring practiced by commercial Banks are able to prevention & detection fraud. The findings are backed by the IFAC (2012) which indicates that monitoring is a vital component of ICS and if applied properly it is able detect any form of error or malpractices early enough before they cause major harm to the organization.

Chapter Five

Summary Conclusion and Recommendation

This chapter provides summary, conclusions, and recommendations based on the main findings discussed in the preceding chapter.

5.1. Summary of the research and Major Findings

The main objective of this study was to establish the relationship between internal control systems and the level of fraud prevention & detection in Ethiopian Banking industry. To accomplish this purpose, the researcher developed research objectives and hypotheses based on the various components of the ICS. The researcher has also developed conceptual and operationalization frameworks. These helped in developing questionnaires to gather information and descriptive research design was adopted for this study. The researcher used a sample of nine commercial banks from a targeted population of nineteen commercial banks in Ethiopia. To ensure that all levels of employees are represented, the study used purposive sampling technique based on the total year of experience in the industry. Quantitative data was analyzed using descriptive statistics and the data was coded and entered into Statistical Packages for Social Scientists (SPSS Version 20.0). Analysis was, then, based on descriptive statistics. Multiple regression analysis was used to establish the relationship between internal controls and fraud prevention & detection in banking industry in Ethiopia. The following is the summary of the findings.

Descriptive statistics: in determining how effective control environment (CE), effective risk assessment (RA), effective control activities (CA), effective information & communication (IAC) and effective monitoring activities (MA) as components of internal control can be used to fraud prevention & detection in Ethiopian Banking industry. The study registered an average of 4 or more than four in Likert scale, which indicated that the respondents were in agreement that the components of ICS can be effectively used to control fraud in the Ethiopian Banking industry.

Correlation analysis revealed that the highest correlation of 0.526 which is between effective monitoring activities and effective control environment. Since there is no correlation above 0.8 in this study according to Cooper and Schendlar (2009), it can be concluded in this study that

there is no problem of multicollinearity, thus enhanced the reliability for regression analysis. Therefore, it can be concluded that in this study that there is no problem of multicollinearity or the results showed that the problem of multicollinearity did not exist between variables in the model. Hence all the variables were retained for use in the estimations.

The study examined and established a significant relationship between ICS and level of fraud prevention & detection. This relationship was examined through the components of ICS and fraud prevention & detection. The components of ICS (control environment, risk assessment, information and communication and monitoring) were linked to fraud control (fraud prevention & detection) and their relationships were tested using ANOVA test. Details of the results from ANOVA test showed that all components of ICS jointly have significant relationship with fraud prevention & detection. The ANOVA test values obtained above fell in the rejection regions when compared with critical values at respective degrees of freedom. Likewise, the p-values were less than the test value of 0.05.

The coefficient of determination proved that the independent variables contributed to 87.2% of the variation in the level of fraud prevention and detection as explained by adjusted R^2 of 75.3% which shows that the model was a good predictor. This is supported by a study by Kakucha (2009) who evaluated the level of effectiveness of internal controls of enterprises operating in Nairobi. Data was analyzed using a multiple regression model and the results of the analysis exhibited a positive relationship between internal controls and the level of fraud prevention and detection. This study therefore seeks to investigate whether internal control affects the level of fraud prevention and detection.

In regard to direction of the effect the results of the regression model show that there is a positive relationship between internal controls and fraud prevention & detection in Ethiopian Banking industry. Holding all the other factors constant, the level of fraud prevention & detection in Ethiopian Banking industry is measured by the efficiency and effective implementation of internal controls. The results of the multiple regression model show that there is a positive relationship between internal control and level fraud prevention & detection in Ethiopian Banking industry except risk assessment. This implies in the remaining four variables a single unit increase in any of the independent variables results into a corresponding increase in the level of fraud prevention & detection in Ethiopian Banking industry.

From significant perspective, the regression analysis was undertaken at 5% significance level. The criteria for comparing whether the predictor variables were significant in the model was through comparing the corresponding probability value obtained and $\alpha=0.05$. If the probability value was less than α , then the predictor variable was significant but from the analysis the results above show that the variables were significant since their corresponding predictor values were below 5%. This is demonstrated by the level of significance attained by each of the independent variables. All the independent variables have a significance of less than 5%. This is an indication that all variables are statistically significant with the fraud prevention and detection.

5.2. Conclusions

The following conclusions were driven from the findings:

- Based on the findings of the study, it is concluded that the effective internal control system (ICS) established by various commercial banks are able to control fraud as supported by the study findings on control environment, risk assessment, control activities, information & communication and monitoring.
- From the findings of the study, it was concluded that commercial banks that had invested on effective internal control systems had more improved fraud prevention & detection as compared to those commercial banks that had a weak internal control system. From the findings, it was revealed that those commercial banks that observed effective control environment, risk assessment, control activities, information & communication technology and monitoring recorded high-level fraud prevention & detection. Most Commercial Banks that fully invested in strong internal control systems were able to mitigate fraud.
- The findings of the study found that control environment had a significant positive relationship with level of fraud prevention & detection. Similarly, the other variables for instance control activity, information & communication technology and monitoring was also found to have a positive relationship with level of fraud prevention & detection apart from risk assessment that revealed a negative relationship with financial performance of Ethiopian Banking industry.

- The research has also concluded that there is a significant relationship between internal control system (control environment, risk assessment, information and communication and monitoring) and fraud prevention & detection in Ethiopian Banking industry.

5.3.Recommendation

Since it was evident from the findings of the study, the following recommendations were forwarded to banks at large, management of various banks, and governing body's:

- Management should ensure that proper internal control system is developed and ensure their full implementation to reduce chances of fraud commission. There should be a deliberate attempt by the management to forge a cordial working relationship with other employees in order to ensure any information gathered by the employees can be passed effortlessly to the management for action. This relationship may help the employees to appreciate their jobs, thus improving their input and reduce cases of errors.
- Commercial Banks should develop a mechanism to incorporate relevant feedback from the various stakeholders into their internal control system. Commercial Banks should develop and organize constant seminars and workshops to train and educate auditors and accountant on matters pertaining proper implementation of accounting policies and procedures to enhance their skills and expertise in their practice as professionals. The study also recommends that the commercial Banks shall establish and manages knowledge/information management system within the institution, so as to enable all parties within the institution to freely access and utilize necessary official information that will enable the employees to embrace and appreciate their roles in enhancing vigilance against fraudsters.
- Banks are secretive and until a scandal hits no one really knows the extent of internal control problems that exist in banks and inactive boards of directors maybe under maybe under the impressions of false assurance of internal control effectiveness. This is This is even more likely in the banking industry with its rapidly changing business model. The researcher recommends that boards of banks in Ethiopia should be very very active and ensure continuous ongoing and separate internal control monitoring to

monitoring to ascertain that controls really exist and are functioning properly. This study looked at only the five internal control components; the researcher again recommends further research that will investigate internal control effectiveness in FDP involving other variable using secondary data for number of fraud prevented.

- The study further recommends that the governing body, possibly supported by the audit committee, should ensure that the internal control system is periodically monitored and evaluated. The actual assessment can be executed by the organization's management. A staff person who is sufficiently independent from those responsible for the system, such as the internal auditor, could provide additional assurance on the effectiveness and cost efficiency of the internal control system. The commercial banks should transparently report on the structure and performance of their internal control system in their various reports to internal and external stakeholders, such as through their periodic accountability reports or on the organization's website.

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Annex- Questionnaires

Questionnaires’ for the assessment of Effectiveness of Internal Control System in Detection of Fraud in case of Ethiopian Banking Industry

The objective of this study is to assess the effectiveness of Internal Control System in Detection and prevention of Fraud in existing Ethiopian Banking Industry. To supplement the data obtained from different sources, the researcher looks to gather relevant information from a sample of your bank using self-developed questions.

Participation in this study is completely voluntary, the questionnaire results will be recorded anonymously and strict confidentiality will be maintained and individual responses will not be identified in the paper.

➤ **Demographic Information**

1. Sex Male Female
2. Age 20 – 27 yrs. 28 – 35 yrs. 36 – 40yrs 41 – 55yrs Above 56
3. Education Diploma B.A M.A/M.S.C PHD
4. Year of service in the bank
 1 –5 yrs. 6 – 10 yrs. 11 – 15 yrs. 16 – 20 yrs. 21yrs. &above

1. Effectiveness of internal Control in your bank based on Internal Control Components

	1. Control Environment	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	There is clear separation of roles and responsibilities in the bank					
2	All employees in charge of the banks operations are aware of the guidelines of the operation					
3	All staff in charge perform their responsibilities as per the regulations and guidelines					

4	The control environment in your bank is enough to attain the bank's objectives					
2. Risk assessment of IC's						
1	The bank has designed an appropriate strategy of identifying risks.					
2	The bank designed a system to offer appropriate response to risks					
3	Involvement of the internal control staff during implementation reduces the occurrence of risk.					
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
3. Control activities of IC's						
1	Authorization, processing, cheque signing and accounting functions are clearly segregated.					
2	The bank invoices or requests for disbursements are backed by appropriate supporting documents					
3	There is an up-to-date asset register					
4	The procurement and disposal of assets procedure is strictly followed under the bank operation systems.					
4. Information & communication of IC's						
1	Control information's are communicated to all stakeholders					
2	Transactions are promptly recorded and classified to provide reliable information					
3	The officer's responsibility and the right to access are clearly communicated					
4	The consequences of illegal activities are					

	clearly understood by the stakeholders					
	5. Monitoring activities of IC's					
1	The bank has monitoring activities in relation to operational activities.					
2	Monitoring the internal control system of the bank is important to achieve the bank objectives.					
3	Monitoring helps to determine whether controls under the bank are effective.					
4	Internal control monitoring activities of the bank could reduce the occurrence of fraud and illegal activities.					
5	Appropriate actions are applied based on control findings and recommendations.					

2. The Effectiveness of Internal Control system in fraud Prevention and detection

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	The control environment in your bank has a pervasive influence on the way business activities are structured and carried out, the way objectives are established, the way risks are assessed and fraud detected and addressed.					
2.	Your bank has top management with a positive attitude towards the control environment & they are able to establish appropriate policies and procedures to curb and reduce or control fraud.					
3.	Relevant risk information is captured and communicated in a timely manner across					

	your organization and it enables staffs, management and the board to predict the fraudulent activities in advance.					
4.	The internal control system of the bank can reduce and detect fraud & other illegal activities.					
5.	An effective supervision and implementation of strong internal control system is capable of revealing fraudster's mode of operations.					
6.	The policies & procedures maintained by your organization to ensure management directives include a range of activities such as approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets, and segregation of duties.					
7.	The possibility of fraud concealment is reduced by means of the integrity and the accuracy of information.					
8.	An open & effective communication fostered in an organization helps in detecting the possibility of fraud in advance.					
9.	Weak/poor management control, monitoring and supervision of internal control system can cause perpetration of fraud.					
10	Bad leadership of the bank's top management and executives could encourage others to perpetrate fraud.					
11	The management of your organization properly monitor whether or not policies and procedures designed and implemented by management are being conducted effectively by employees and ensure that significant control deficiencies are identified					

	timely and rectified.					
12	Awareness of internal control system by management and staff reduces an attempt to perpetrate fraud.					
13	An effective internal control system is sufficient enough to reveal the lapses and inadequacies in the bank open to fraudsters within and outside the bank.					
14	Top management adherence and submission to the control procedures set in place in all departments of the bank able to prevent the occurrence of management fraud.					

If there is additional information's you want to add, please specify here:

“Thank You for your Cooperation”