



ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

**EVALUATING THE EFFECTIVENESS OF INTERNAL
CONTROL SYSTEMS IN MITIGATING FRAUD RISKS IN THE
CASE OF HIBRET BANK S.C**

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(SGS/0513/2014A)

JULY, 2025
ADDIS ABABA, ETHIOPIA

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**A THESIS SUBMITTED TO ST.MARY’S UNIVERSITY, SCHOOL OF
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DECLARATION

I hereby declare that this thesis entitled —Evaluating the Effectiveness of Internal Control Systems in Mitigating Fraud Risks in the case of Hibret Bank S.C|, has been carried out by me under the guidance and supervision of Dr. Reta Megersa

The thesis is original and has not been submitted for the award of any degree or diploma to any university or institutions.

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This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a university advisor.

A handwritten signature in black ink, appearing to be 'Reta Megersa', is positioned above a solid horizontal line.

RETA MEGERSA (Ph.D)

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LIST OF ACRONYMS/ABBREVIATIONS

CACE	Control Activities Control Environment
COSO	Committee of Sponsoring Organizations of the Treadway Commission
HB	Hibret Bank S.C
IC	Information and Communication
MA	Monitoring Activities
NBE	National Bank of Ethiopia
RA	Risk Assessment

ABSTRACT

This research determines the effectiveness of the internal control system in mitigating fraud risks in the case of Hibret Bank S.C. Internal control defined as a process that has been accepted by the board, management and staff of an organization that provides reasonable assurance over objectives, the effective functioning and reporting of the company, compliance with regulations and maintaining the reputation of the company. The key aims of the research to test the usefulness of internal control system in detecting fraud risk. Internal control system components (control environment, risk assessment, control activities, information & communication, and monitoring activities) were considered as independent variables in this research whereas fraud risks were the dependent variable. Descriptive, explanatory and qualitative research methods were carried out in this study. The primary data was gathered using questionnaire tool and the qualitative data was gathered by interviewing five people within Internal Audit and Risk & Compliance Departments. The populations of the research to be carried out were Hibret Bank employees who were occupying a managerial job in both Head office and Branches located only in Addis Ababa, and by using simple random sampling method 244 employees were selected. The sample size used to obtain the quantitative data comprises 232 employees. The research utilized both descriptive and inferential statistics in the data processing with the help of Statistical Package for Social Sciences (SPSS) Version 25. The research established that the five components of internal control positively and significantly contribute to the prevention of the bank fraud risks at Hibret Bank. It was also found in the study that there is negative and strong correlation between independent variables (the five components of internal control systems) and the dependent variable (occurrence of bank fraud risks). This means that a increase in one element of internal control system would result into the reduction of incidences of the common kinds of bank frauds within the Bank. In addition to that the qualitative information indicated the significance of the efficient internal control systems in mitigating risks of frauds along with the necessity of the sufficient implementation, employee awareness, and continuous monitoring in terms of the effectiveness of these systems. Therefore, the research concludes that the internal controls as applied by Hibret Bank have a great role in minimizing risk in case they are effectively utilized. Nevertheless, the potential is hampered by the ambiguities in communication and unproductive monitoring. It is crucial to fight such areas which are led by qualitative understanding of the matter along with the quantitative evidence in order to achieve greater overall effectiveness in the fight against fraud. It can therefore be concluded that, all controls unless well designed and implemented could provide room through which fraudulent practices could occur.

Keywords: Risk Assessment, Control Activities, Information and Communication, Monitoring, Control Environment

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

A financial institution, particularly a bank, plays a crucial role in the economic framework of a country. Banks facilitate the flow of money by accepting deposits and issuing loans, thereby managing the varying demands of depositors and borrowers (Heffernan, 2005). These are two purposes of banks apart from providing for their rationale existence in modern-day economies, although various other financial entities provide additional services. Risks affect the banking sector in different ways like other service providers are exposed. While considering risk, we consider unpredictable situations that can impact the financial, operational, and strategic goals of an institution. According to the Bank for International Settlements (2013), risk is —the potential for loss or negative impact on financial performance or stability resulting from uncertainties in economic, market, credit, operational, or other factors that may affect the value of assets, liabilities, or overall financial condition of an institution. The primary risks working in the banking sector include credit, counterparty, funding or liquidity risk, payments or settlement risk, price or market risk, capital risk, and operational risk.

Operational risk refers to the possibility of suffering loss or injury as a result of insufficient or unsuccessful systems, personnel, internal processes, or external events. (Basel Committee on Banking Supervision, 2004) It encompasses a broad spectrum of hazards related to an organization's daily operations, such as mistakes, fraud, system malfunctions, problems with legal and regulatory compliance, and outside incidents like natural disasters or cyber-attacks. Fraud is one of the frequent problems in the banking sector among the many kinds of operational risk. According to research by Zager and Novak (2016), bank fraud damages a country's reputation and also causes stakeholders to lose trust in and confidence in banks.

Fraud is a global phenomenon and is a broad term that affects all sectors of the economy. It is defined by NBE (2014) as —an act or omission by shareholders, directors, and employees, customers committed to gain dishonest or unlawful advantage for the party committing fraud or for other parties. Frauds are perpetrated by parties and organizations to obtain money, property, or services; to avoid payment or loss of services; or to secure personal or business advantage.

According to Chartered Institute of Management Accountants (CIMA, 2008), though there is no single reason behind fraud, it is necessary to take account of motivation of potential offenders, conditions under which offenders can rationalize their prospective crimes away, opportunities to commit crime, perceived suitability, technical ability of the fraudster, expected and actual risk of discovery, expectations of consequences of discovery and actual consequences of discovery.

Risk management and internal control go hand in hand in risk management, which is all about identifying threats and opportunities, and internal controls work towards resisting threats effectively and exploiting opportunities (Stephen and Vincent, 2015). There are risks for every organization that the organization's goals and objectives will not be achieved. Steps to prevent such risks or identify and correct such risks are regarded as internal control (Odunayo, 2014)

Internal control systems can be understood as the whole system of control established by the management to carry on the business of the enterprise properly and efficiently. It includes the control procedure and control environment, all policy and procedure adopted by an entity's management and directors in order to assist them in their objectives, i.e., the adherence to internal policy, safeguarding of assets, prevention and detection of fraud and error and completeness and accuracy of records, with prompt generation of effective financial information (Benjamin, 2001).

For banks, it is essential to know their strength and weaknesses of their internal control to back fraud prevention mechanisms and protect their stakeholders' interests.

Through the evaluation of the effectiveness of such systems, banks can identify any gaps or improvement areas, re-engineer their control activities, and implement more robust risk management mechanisms. Accordingly, this study will attempt to evaluate the adequacy of internal control mechanisms in mitigating fraud risks in Hibret Bank.

Through the consideration of the setup and design of the systems, their contribution to fraud detection and prevention, and areas of improvement, the study will strive to contribute to the existing knowledge on fraud risk management in banks in the case of Hibret Bank S.C.

1.2. Statement of the problem

In bank operations, fraudulent acts that are intended to make money or bring about loss to customers are referred to as industry fraud. Insider fraud, account hijacking, check fraud, credit card fraud, identity theft, and electronic payment fraud are only some of many types of fraudulent acts that fall under this category. Despite the best efforts of banks to avoid and detect fraud, fraudsters continue to steal clients' money by bypassing all security features (Olatunji, 2009).

Banking fraud is on the rise, both in terms of variety and scale, across the globe. Numerous reports from various regions back this up. For instance, the Association of Certified Fraud Examiners (ACFE, 2020) highlighted that the banking and financial services sector in the USA accounts for the highest number of fraud incidents, making up 28.8% of cases, with a staggering median loss of \$250,000. Over in China, the banking sector faced a massive fraud investigation in Qingdao, resulting in losses of around 26 billion Yuan. Similarly, India grapples with significant financial fraud, leading to an estimated annual loss of 19 billion USD. In developing regions like Africa, the situation is expected to be even more dire than in developed countries. Data from the Banking Fraud Investigations Department (BFID) of the Central Bank of Kenya revealed that 800 fraud cases resulted in a loss of \$15.2 million for various financial institutions in just the first quarter of 2014. In Nigeria, the Central Bank of Nigeria (CBN) reported that by mid-2019, the number of attempted fraud and forgery cases in banks had already surpassed the total recorded for all of 2018. Similarly, in our country Ethiopia according to investigation reports made public by the Ministry of Justice, fraud losses to Ethiopia's banking sector have totaled 1.8 billion birr over the past five years. According to the study's findings, since 2017, bank fraud attempts totaling 370 billion birr have been made.

The Commercial Bank of Ethiopia reportedly bears half of the losses among all the banks targeted by the scam. A few Ethio Telecom employees are also allegedly complicit in the scam (Fana Broadcasting Corporate Archive, 2022). Besides, The National Bank of Ethiopia and Federal Crime Investigation Bureau (FCIB) annual crime report of 2018 and 2019 showed that Ethiopian Commercial Banks has lost more than 326,343,280 birr to a bank fraud (FCIB, 2018 & 2019). The report also showed that Hibret Bank faced a fraud of Br. 8,381,400.00 which comprises 2.6% of the industry.

In general, fraud risks are a substantial threat to the financial integrity and image of banks around the world. By offering a system of guidelines, rules, and other controls, internal control systems are instrumental in reducing such threats. Few studies have been conducted particularly focusing on Hibret Bank; though various studies have monitored the efficacy of internal control systems in reducing fraud risks in different banking contexts.

Therefore, this study will attempt to close the gap in research by evaluating the effectiveness of the Bank's internal control systems in preventing the risk of fraud at Hibret Bank. Through a critical analysis, such research would establish the strengths and weaknesses of the Bank's internal control systems and their role in fraud reduction. The study will also explore the specific challenges and opportunities Hibret Bank faced when addressing the risk of fraud using its internal control systems.

1.3. Objective of the study

1.3.1. General objective

The general objective of this study is to evaluate the effectiveness of internal control systems in mitigating fraud risks at Hibret Bank.

1.3.2. Specific objectives

1. To identify the challenges to the effective implementation of an internal control system in detecting and preventing fraud in Hibret Bank.
2. To evaluate the impact of the information and communication of the Bank on the effectiveness of internal control systems in mitigating fraud risks.
3. To assess the level of fraud prevention and detection in Hibret Bank.
4. To examine the monitoring activities of the Bank that affect the effectiveness of the internal control system in mitigating fraud risk.
5. To identify the control activities of the Bank that affect the effectiveness of the internal control system in mitigating fraud risk.

1.4. Research Questions

This research will try to answer the question How effective are internal control systems in mitigating fraud risks within the organizations in Hibret Bank S.C?

1.5. Research Hypotheses

Based on theories and previous empirical studies, the following hypotheses are developed

H1. Monitoring Activities have a significant effect on fraud prevention and detection in Hibret Bank.

H2. Information and communication have a significant effect on the effectiveness of **in** the internal control system in mitigating fraud risk.

H3. Risk Assessment has a significant effect on fraud prevention and detection in Hibret Bank.

H4. Monitoring activities have a significant effect on the effectiveness of fraud prevention and detection in Hibret Bank.

H5. Control activities have a significant effect on the effectiveness of the internal control system in fraud prevention and detection in Hibret Bank.

1.6. Significance of the study

The study has the following significances:

Fraud is one of the major risks facing the entire business community; no business is exempt from fraud risk, and it cuts across every aspect of life (Olorunsegun, 2010). This study will contribute to the existing body of knowledge on fraud risk management in the banking industry, specifically in the evaluation of internal control systems. By evaluating how efficient these systems are within Hibret Bank, the research provided valuable insight and contributed to the understanding of best practices for fraud risk reduction.

The findings of the research had also practical applications to Hibret Bank. With its examination of the effectiveness of its internal control systems, the research could identify any shortcoming or areas for improvement. The recommendations can assist Hibret Bank in making its anti-fraud policies stronger, its control activities, and in mitigating possible financial loss along with reputational loss.

Offenses of fraud can have detrimental effects on stakeholders like customers, shareholders, and employees. By evaluating the efficacy of internal control systems as banks must operate in a highly regulated environment and effective internal control systems play a critical role in guaranteeing compliance with regulatory demands, and this research aimed to protect the interests of stakeholders by establishing the shortcomings of the existing systems and recommending enhancements in fraud prevention and detection and also to guarantee its internal control systems concur with regulatory standards and guidelines and thereby reduce the threat of non-compliance and resulting fines.

Overall, the significance of this research lies in its ability to improve fraud avoidance processes, protect the interests of stakeholders, enhance regulatory compliance, and contribute to the understanding and knowledge of internal control systems in preventing fraud risk at Hibret Bank and in the banking industry at large.

1.7. Scope of the study

This study is centered on the theme topic of fraud risk management in the banking sector, more particularly evaluating how effective internal control systems are in mitigating fraud risk. The study is grounded in the COSO Internal Control Framework that has five basic components: control environment, risk assessment, control activities, information and communication, and monitoring activities. The study aims to analyze the effectiveness and strength of each internal control component in preventing and detecting frauds in the bank with the aim of determining gaps and making recommendations.

Geographically, the research is conducted on Hibret Bank S.C. focusing on its Head Office as well as its branch offices in Addis Ababa, Ethiopia. This case area was selected owing to its strategic significance to the activities of the bank, as the capital city accommodates the highest number of the bank's core management, internal audit tasks, and high-transaction-volume activities where fraud risk could be even more visible.

Moreover, conducting the research in Addis Ababa offers practicality in logistics with respect to access to staff and information, and ensures that competent managerial staff involved in implementing and overseeing internal control mechanisms are involved.

Methodologically, the study uses a mixed-methods research design where qualitative and

quantitative research approaches were implemented .Quantitative data was conducted through questionnaires distributed to managerial personnel of Hibret Bank, while qualitative data gathering was conducted through interviews with key respondents from the Internal Audit and Risk & Compliance Departments. The simple random sampling method was employed, and a final sample of 232 respondents out of 244 intended was achieved. Statistical Package for the Social Sciences (SPSS) Version 25 was employed in data analysis utilizing both descriptive and inferential statistics to test for correlations between fraud risk and internal control elements. Qualitative perspectives further enriched interpretation of the statistical findings and lent applied meaning to the conclusions of the study.

1.8. Limitation of the study

Despite having a presence across Ethiopia, the study is geographically limited within its Head Office and branch offices in Addis Ababa. There is a geographic constraint to knowing how internal control mechanisms function across regional or rural branches, where control may be less stringent and fraud dynamics may be different because of resource constraints, manpower arrangements, or operational exposures. The findings thus will not be fully generalizable to the entire banking chain of Hibret Bank, due to lack of budget, adequate time and accessibility.

Methodologically, the study uses a mixed-methods design, with questionnaire-based quantitative data dominating and a smaller number of qualitative data derived from interviews. The study is, limited to managerial position , thereby not including clerical and non-clerical staff, who are often frontline implementers of control and might have first-hand experience of fraud incidence.

Fraud is itself a dynamic and continuously changing menace, and even more so when considered against the backdrop of rapidly changing bank technologies, such as mobile banking and electronic payment systems. The study does not particularly examine technology-driven fraud menace or cyber security controls, which are ever more relevant in the contemporary banking environment.

1.9. Operational Definition of new terms

Managerial employees – are employees of the bank that work on the position that starts from assistant branch manager, branch manager, department manager up to the president.

Clerical employees- are employees of the bank that work starting from grade V(five) like typists, junior trainee tellers, secretaries and clerks up to positions below assistant branch managers.

Non clerical employees- are employees of the bank that work on positions from grade I-IV(one up-to four) like cleaner, messengers, securities, cash office(cash Aid) etc.

1.10. Organization of the Study

This study organized into five chapters, The first chapter presents the introduction which includes , background of the study, statement of the problem, objectives of the study, and research question, hypothesis, significance of the study, scope of the study ,limitation of the study and operational definition of new terms . Chapter two presents and elaborates definitions of terms, theoretical framework, review of empirical studies and conceptual framework of the study. Chapter three covers the methodology of the study comprising research design, population size, sampling method, sampling size, data collection method, data analysis, and ethical considerations. Chapter four covers results and discussion. Finally, chapter five covers summery, conclusion, recommendation and suggestion for further research of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. Theoretical Review

2.1.1. Definitions of Internal Control

Internal control can be understood differently by different authors: Gupta (2001) citizen described it as —the arrangement and all techniques and practices applied by a company's managers to support the financial objectives, always ensuring that business is managed as reliably as possible and policies observed, assets remain safe, fraud and errors reduce, and there is accuracy in financial statements.¶

The ICAEW (1999) define internal control as: the policies, procedures, tasks, behaviors, and other aspects that facilitate the effective and efficient operations by enabling the company to respond appropriately to the different risks; ensuring the quality of both internal and external reporting; and ensuring adherence to applicable laws and regulations, and other internal laws of the company.

COSO (1992) describes internal control as a process approved by an organization's board, management and employees that helps offer reasonable assurance for objectives, the successful operation and reporting of the company, adherence to rules, and the upholding of the company's reputation.

The Basel Committee on Banking Supervision (2014) defines internal control as "the process put in place by the bank's board of directors, management, and other personnel to provide reasonable assurance regarding the achievement of the bank's objectives in the following categories: effectiveness and efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations¶. The Public Company Accounting Oversight Board (2010) also defines internal control as a process intended to offer a reasonable level of assurance regarding the accomplishment of goals in the effectiveness and efficiency of operations, the dependability of financial reporting, and compliance with applicable laws and regulations.

2.1.2. Objectives of Internal Control

The objectives given by the Committee of Sponsoring Organizations of the Treadway Commission (2013) for internal control are to maintain accurate reporting, follow laws and regulations, and help operations run properly and efficiently. It is also important to use internal controls to shield assets from fraud.

2.1.3. Components of Internal Control System

Combined charter, as mentioned by the Committee Sponsoring Organizations of the Treadway Commission, is made up of five combined internal control elements (2013). For any internal control system to work, its components should be carefully set up, correctly applied, and support one another exercise. The structure of internal control shows Control environment, Risk assessment, Control activities, Information and communication, and Monitoring activities.

1. Control Environment

The management and staff of an organization show their attitude, awareness, and behaviors toward internal control and what it represents for the organization's culture in the control environment. It brings together what the management does, the way ethics are understood in the firm, and stresses on doing the right thing. The environment in which controls are applied is vital for shaping the organization's methods of managing risks, governance, and compliance (COSO, 2013).

2. Risk Assessment

According to the Committee of Sponsoring Organizations of the Treadway Commission (2013), risk assessment in the context of internal control systems involves the identification, analysis, and management of risks that could impede an organization from achieving its objectives.

The probability and effect of potential dangers on an organization's operation, financial report, and adherence to responsibilities should be included in its scope. Risk assessment pursues the organizations as an aid to the entity in defining and minimizing critical risks.

Risk assessment includes a vibrant and iterative process for finding and evaluating risks to the accomplishment of objectives. Risks to the accomplishment of these objectives from inside the entity are measured comparative to conventional risk tolerances. Hence, risk assessment procedures are the foundation for determining how risks will be handled. A requirement of risk

assessment is the formation of objectives, connected to different hierarchies of the organization. Management stipulates objectives within groups connecting to operations, reports, and agreements with adequate simplicity to be able to detect and investigate risks to those objectives. Management also contemplates the appropriateness of the objectives for the entity. Risk assessment also requires management to think through the effect of probable variations in the outside environment and within the business model that may render internal control ineffectual (Rokeya et al, 2011)

3. Control Activities

The majority of control activities can be divided into two categories: preventive and detection activities. The formulation of these controls includes forecasting possible difficulties before they happen and applying ways to circumvent them. Predicting potential problems before they arise and implementing solutions to get around them are part of the formulation of these control activities.

Detection activities are framed to find detrimental events that do happen, and aware management about what has occurred. Prevention controls incline to be costly than detection controls. Costs and benefits must be evaluated before control activities are applied.

According to the Basel Committee (1998), control activities are involved at various stages within the bank's administrative structure, which include:

- Operational Performance - Control activities in this part embrace the evaluation of risk in the real financial performance related to the accounted projections. Any substantial discrepancies are then scrutinized to decide whether any explicit bank action must be updated.
- Information Processing - Control activities in this part embrace the authentication of the precision & comprehensiveness of bank transactions to control whether they have been accurately approved.

Control activities in the information part are generally dignified through two methods: general control & application control. General control is oversight over data processing systems, comprising processors and servers, and system software obtaining, conservation, and admission.

Application control is the omission for the plan that the bank uses to plan and screen transactions.

- Physical Controls - in general it focuses on limiting access to physical resources, comprising cash & check stocks. Control activities embrace physical boundaries, dual safekeeping, & regular inventory count.
- Segregation of Duties - Control activities in this part refer to the obligation of the several duties participated in a transaction, or any bank activities, to different peoples. This method is proposed to avert a bank worker from being in a location to commit criminal activities in the way of that individual's regular duties.

Such activities stop errors, identify them when they happen, guard the company's assets, assure adherence to policies, and enhance how things are done.

4. Information and communication

Information and communication in internal control is the process and systems that enable the organization to obtain, share, and report relevant information in a timely manner.

This component of internal control corroborates the fact that information is identified, recorded, and communicated in a form and within a timeframe that enables individuals to carry out their responsibilities. It helps in sharing the necessary information required for efficient internal control (COSO, 2013).

Internal communication is the way by which information is dispersed all over the institute, flowing horizontally, vertically within the organization. It enables workers to obtain a clear communications from senior managers that control obligations must be taken seriously. Similarly, external communications are twofold: they enable incoming communications of significant exterior information, and they deliver information's to outside entities in reply to requirements and expectations.

5. Monitoring Activities

Monitoring activities within an internal control system involves continuous assessment of the effectiveness of the internal controls. This component of internal control ensures that the other components of the system are operating as intended in the long run. Monitoring activities can consist of routine supervisory and management functions or objective assessments or a mix of

both. Monitoring activities are necessary in order to detect and correct weaknesses in the internal control system (COSO, 2013).

Jones (2008) refers to monitoring as a process of evaluating the overall all organization operation and ensuring that controlling activities apply in accordance with organization policy and procedures. In the time of monitoring if there is any deficiency in organization actual performance there should be take a corrective action and improve the controlling system. According to Coffin (2003) monitoring involves the activities and standard to evaluate the success of internal control system in accomplishing the organization objectives.

2.1.4. Concepts of Fraud

The term fraud has different connotations to different schools of thought. For instance, Chui (2010) suggests that even scholars have established a long list of guiding terms to simplify the meaning of the term fraud.

According to Sitorus (2008), fraud is the act of corrupt practices encompassing financial crimes such as money laundering and any other financial discrepancies conducted for personal fulfillment. Akers and Bellovary (2006) agree with the above view that fraud is an act of deliberately falsifying, misrepresentation, and deceiving organizations in pursuit of personal gain.

Archibong (2002) describes Fraud as a predetermined and well planned tricky process or device usually undertaken by a person or group of persons, with the sole aim of checking another person or organization, to gain ill-gotten advantages, be it monetary or otherwise, which would not have accrued in the absence of such deceitful procedure.

The National Bank of Ethiopia views fraud as —any act or decision by shareholders, directors, or employees that aims to take unfair or unlawful profits by a party or others. Still, according to the Institute of Internal Auditors, fraud is identified as any illegal behavior that involves misleading, hiding facts, or disloyalty. Less sophisticated frauds do not always involve threats of violence or harm to people. Frauds may be carried out by various individuals and organizations to gain cash, possessions, or services; to avoid spending their own money; or to help themselves or their companies in other ways.

2.1.5. Types of frauds

There are several types of fraud being committed globally. Fraud can be categorized into two groups. Jackson et al., (2010) postulate that there are two categories of fraud, which are financial statement fraud and occupational fraud. The authors described financial statement fraud as the misrepresentation the financial state of an organization, while occupational fraud is mostly committed by employees who steal items or money from a company.

According to Woods (2017), some of the common bank frauds include theft, embezzlement, defalcations, forgeries, payment against uncleared effects, unauthorized lending, lending to ghost borrowers, unofficial borrowing, foreign exchange malpractice, impersonation, manipulation of vouchers, fictitious accounts, over and under valuation of properties, false declaration of cash shortages, falsification of status reports, duplication of cheque books, interception of clearing cheques, computer frauds, fake payments, and others.

1. Theft and Embezzlement

Theft in a bank happens when somebody takes cash or property from the bank or its customers without permission, most often by breaking into the bank or customer's house, for example through robbery or burglary. If an employee or manager who deals with the bank's finances uses some of the assets for their benefit instead of for the bank that is considered embezzlement. Having money stolen or embezzled from a bank has major negative effects, including possible punishment by the law, great financial damage, and harm to the bank's reputation.

2. Defalcation

If a bank staff member illegally uses or steals clients' money, it is called defalcation. Most often, this happens when an employee in the bank, such as a teller or manager, does not handle the funds or records properly and this causes the bank and its customers to lose money.

3. Forgeries

Forgeries involve the fraudulent copying and use of a customer's signature to draw huge amounts of money from the customer's account without prior consent of the customer. Such forgeries may be targeted at savings accounts, deposit accounts, current accounts, or transfer instruments such as drafts. Experience has shown that most of such forgeries are perpetrated by

internal staff or by outsiders who act in collusion with employees of the bank, who usually are the ones who release the specimen signatures being forged (Oraka et.al, 2016).

4. Unofficial Borrowing

In a bank loan fraud, a person or business manages to get a loan illegally, usually by providing false information or fake papers. As a result, banks suffer real financial losses and might see a drop in their reputations. Any breach of lending policies should be identified and stopped as soon as possible by banks.

5. Foreign Exchange Malpractices

This involves the falsification of foreign exchange documents and diversion of foreign exchange that has been officially allocated to the bank, to meet customer's needs and demand, to the black market using some ghost customers as fronts.

6. Impersonation

It happens when a person pretends to be someone else in order to commit fraud. Fraudsters also ask for new cheque books under another person's name and then use them to commit a fraud. Many times, conniving bank workers have made it very easy for criminals to impersonate customers using their signatures and photos found in their papers (Oraka et al., 2016).

Banks carry out checks for identity and use sophisticated software to find cases of fraudulence to minimize impersonation fraud. They should also protect their personal information and tell their banks right away if anything seems unclear.

7. Manipulation of Vouchers

This type of fraud entails converting or substituting entries from one account to another which is being used for the fraud. It goes without saying that this account would be a fictitious one where the 17 funds of unsuspecting bank customers are moved. Lesser amounts are normally stolen so as not to raise suspicion with top management or other unsuspecting bank employees.

Voucher manipulation can thrive in a banking system beset with poor checks and balances such as inadequate job segregation and lack of effective daily examination of vouchers and all bank documents (Ravisankar, et al 2016).

8. Altering the Status Report

A common type of fraud entails status report falsification and/or status report doctoring. This is often done with the aim of issuing undue recommendation and opinion to unsuspecting customers who do business with the bank customers. Some customers, for example, will give out contracts to a bank customer only if he/she produces evidence that he/she has the ability to execute the work and that they are on a sound financial footing.

1. Fake Payments

It involves the teller recording a bogus cheque into his/her cage. It is done with or without the collusion of other bank staff or bank customers. This type of fraud is however easy to detect if the bank adopts the policy of thoroughly verifying all vouchers, checks, and withdrawal slips and payments on a daily basis (Oraka, et.al, 2016).

2. Computer Frauds

This consists of the criminal use of the bank's computer either at the data input point, the processing point of the input or even the data output point. Computer frauds can also be caused by unauthorized input system, virus, program manipulations, transaction manipulations and cyber thefts. In this era of extensive use of ATMs and online real time e-banking and commerce; computer frauds caused by cyber thefts and crimes has assumed a very dangerous proportion.

2.1.6. Cause of Fraud

Fraud happens in Akelelo's (2012) view when individuals consider that, from their job, they can gain funds they cannot openly talk about, and then go ahead to commit an act of fraud. LACPA 2009, CIMA 2008, and APA 2011 indicate that fraud is often caused by perceived stress, available opportunity, and finding justification for it.

1. Perceived pressure

Pressures are those reasons which motivate employees to commit fraud to meet personal financial requirements.

Ruankaew (2013) Pressure develops from personal situations to get money to meet financial problem. Apart from Ruankaew description pressure can be financial and non-financial. Financial pressure that can lead to fraud consists of: personal financial trouble, family problem, debt, or need to meet short term financial problem. Nonfinancial pressure comes from work

frustration, absence of self-discipline and greed these pressures provide the motivation to commit fraud.

1. Opportunity

It is created by poor control or badly designed structure which motivates the employees to do unethical activities or to commit fraud. Lebanese Association of Certified Public Accountants (LACPA, 2009) states Opportunity is created by organization and used by employees to commit fraud.

Every employee has access in their working area and it makes easy to commit fraud. If the organization internal control is weak and give the employees free access they use their access of information, financial record and resources to commit fraud. 14 Rabi'u A. & Noorhayati M. (2015) opportunity as "the ability to work around fraud controls, and also the ability and potential of an employee to realize the loopholes of the organizational system and taking advantage of it by making fraud possible" the above definition indicates that employees with unethical behavior readily utilize the organization gap indulge in unethical activities. Organization which doesn't have any sound procedures to identify fraud offers more space for frauds to occur within the organization. Auditor of Public Accounts (APA, 2011) affirm people who tend to commit fraud rise due to poor internal control, management negligence, lack of well-established procedure and policies, and supervisory activities.

2. Rationalization

Rationalization differs in the interpretation or mind set up of the fraudster. LACPA (2013) "Rationalization is a process by which fraudster justifies his fraudulent act in acceptance to inner moral compass". It is the process by which a person aligns his act with the commonly accepted principles of courtesy and trust.

The person with unethical behavior he/she readily rationalizes his fraud.

For trustworthy people and those having a moral standard, it is hard to rationalize for unethical behavior. Considering the causes of fraud in banking, banks perform some actions to mitigate the risks which are associated with fraud by developing and applying risk management (more specifically fraud risk management), internal control and honest corporate governance. In

accordance with Priantara (2013), the fraud risks that may occur should be minimized or avoided through the following ways:

- ❖ Establish an effective internal control structure: - However much a company expands, the work of the management to monitor the operations of the company becomes overwhelming. For the goals established by the top management to be achieved, the safeguarding of company assets is guaranteed, such that the management needs to establish an effective and efficient internal control structure so that the prevention of fraud can be carried out effectively and efficiently.
- ❖ Control activities can be effective by observing the performance of employees, data processing to convert into information which has accuracy and completeness, physical control of assets by proper safeguarding facilities free from access to assets, and segregation of duties is beneficial for assigning responsibilities to different individuals separate in order to avoid double duty and authority.
- ❖ Enhance organizational culture:- The organizational culture is enhanced by using the concepts of the GCG (Good Corporate Governance) principle which are interrelated to encourage the organization resources' performance to work efficiently.
- ❖ Efficient internal audit function: - Though it is impossible on the part of the internal auditor to guarantee that fraud will not occur, he must employ the skill of his profession with care so that fraud detection is expected and be able to provide useful suggestions to management for preventing fraud.

2.2. Empirical Studies

Kalkidan (2017) analyzed Dashen Bank's fraud control practices. And, the findings showed that the bank has an anti-fraud and anti-money laundering policy to counteract fraudulent activities, yet several issues affect its effectiveness. The main types of fraud are denial of customer withdrawals, identity fraud, forged checks, and cash fraud, usually caused by poor ethics, lack of online audits, and poor employee background checks. There are no strong controls within the company because HR does not carry out proper background checks and management does not clearly state their ethics. The function does not make it clear what possible fraud threats exist to everyone in the bank. Also, there are too few control activities in place, as there is no use of job

rotation or duty sharing, and the monitoring is weak, since the internal auditor notices flaws and issues but they are not properly corrected.

Some control mechanisms are faulty, for example, the fact the bank's customer information is no longer up-to-date, some ATMs and checkpoints lack cameras, and there is no call center available day or night for fraud reporting. Bank workers are not properly informed about the ways to prevent fraud and how to deal with it, and those just joining the bank do not receive much training.

Leah (2015) the research sought to determine the effect of internal controls on the detection and prevention of fraud in commercial banks in Kenya. Primary data were utilized in the research. An ordinary linear regression model was utilized in the research. Statistical Package for Social Sciences (SPSS) software version 20 was used to conduct the regressions. The regressions indicated that reconciliation control was negative and significant concerning the level of fraud prevention and detection. The results also indicated that there is a significant and negative relationship between financial governance control and fraud prevention and detection level, while the relationship between reporting and budget control and fraud prevention and detection level was significant and positive.

The research carried out by Olaoye (2017) looks at the roles of auditors in identifying and preventing fraud in banks based in Southwest Nigeria. The study looked into how professionals in risk review, auditing, and report checking play a role in bank fraud control. To complete this study, we gave survey papers to the banks in Southwest Nigeria that were chosen in the sample group. Using ANOVA and multiple regressions, the researcher obtained the results. It was uncovered that fraud control and risk assessment management were lacking in Nigerian banks, which ended up impacting 35%, 13%, and 18% of wrongdoing in the banking industry in Southwest Nigeria. For this reason, it was understood that examining risks, checking the function of systems and on financial statements would show how auditors are helping Nigerian banks with fraud detection.

Fikru (2018) regulatory bodies and banks have proposed and allowed internal control mechanisms to monitor the occurrence of bank fraud practice. But the success of any internal control system will be a function of how dynamic the system plays with itself and how well integrated it is in the business processes of the organization. This paper examines the challenges

of effective internal control versus fraud Detection and prevention in the Ethiopian banking industry using primary data. By a survey method, this research investigated the degree to which internal control systems of the banks of Ethiopia contribute to preventing or fighting fraud in the banking industry. To this, the study examines how many Ethiopian banks' internal control are effective in their operations and, depending on that effectiveness, the researcher tests the functioning of ICs in preventing and detecting fraud in the Ethiopian banking sector. Among the results were that method approaches of banks' internal control systems used while detecting fraud have been successful but provide traces on some enhancements and the final result of this is that there is a high correlation between internal control system (control environment, risk assessment, control activity, information and communication and monitoring) and fraud.

According to Agegneu (2019), there is a substantial relationship between the performance of an organization and how its internal control systems work. Since some part of all internal control systems exists, it enables keeping business records properly, ensuring no information is missing, and helps detect possible fraud or collusion committed by people in important positions. For this reason, strong internal control systems can influence a business's performance in many ways. Every organization's internal controls need to be adequate to work properly.

2.3. Research Gap Analysis

The reviewed empirical studies highlight various aspects of fraud control and internal controls in the banking sector across different regions, yet common gaps and areas for further investigation emerge. Kalkidan (2017) and Fikru (2018) both focus on the Ethiopian banking industry, with Kalkidan's study on Dashen Bank revealing specific weaknesses such as poor ethics, inadequate background checks, lack of online audits, and insufficient training. Fikru's broader study in Ethiopia confirms a high correlation between internal control systems and fraud detection but suggests room for enhancement in existing methods. While both studies acknowledge the presence and importance of internal controls, a more granular analysis of how these identified weaknesses in specific control activities contribute to different types of fraud, and the precise impact on the effectiveness of detection and prevention, remains an area for deeper exploration. The existing literature, while identifying problems, does not fully quantify the extent to which these specific control failures lead to financial losses or a rise in particular fraud types.

Furthermore, while Leah (2015) in Kenya and Olaoye (2017) in Nigeria provide insights into the role of internal controls and auditors, respectively, their findings, when viewed collectively, suggest a need for more comparative analysis. Leah's study, for instance, found negative relationships between reconciliation and financial governance controls and fraud prevention, while Olaoye's research indicated deficiencies in fraud control and risk assessment management in Nigerian banks. These regional differences highlight that the effectiveness of specific control mechanisms might vary significantly based on the local regulatory environment, banking practices, and prevailing fraud schemes. A notable gap is the lack of research that directly compares the effectiveness of different internal control frameworks or specific control activities across diverse national banking contexts, which could provide valuable insights into universally effective practices versus context-specific solutions.

Finally, while Agegneu (2019) broadly establishes a substantial relationship between internal control systems and organizational performance, and the other studies touch upon the effectiveness of controls in fraud detection and prevention, there is a limited focus on the dynamic interplay between evolving fraud schemes and the adaptability of internal control systems. Kalkidan (2017) points to issues like outdated customer information and lack of 24/7 fraud reporting, suggesting that control mechanisms can become obsolete. The existing literature largely assesses the effectiveness of current internal controls against existing fraud types. A significant gap lies in research that proactively investigates how banks can design and implement dynamic internal control systems that can anticipate and adapt to emerging fraud trends, especially those driven by technological advancements, and how this adaptability impacts long-term fraud resilience and overall organizational performance..

2.4. Conceptual Framework

The purpose of the framework is to show the relationship between prevention and detection of fraud in Hibret Bank by implementing effective internal control components (Control environment, risk assessment, control activities, information and communication and Monitoring activities).

Independent Variables

Dependent Variables

Independent Variables

Dependent Variables

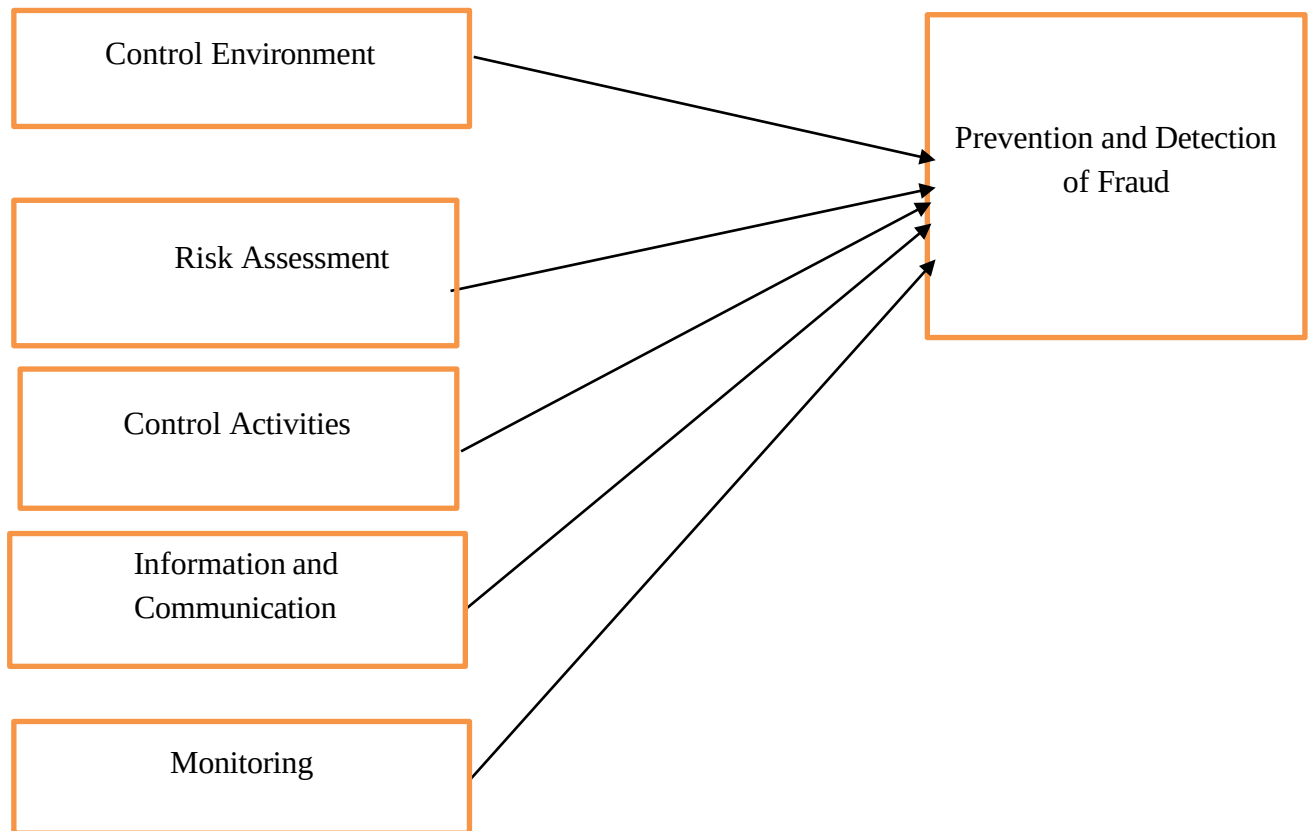


Figure 2.1: The Conceptual Framework of Internal Control in fraud prevention and detection

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter discusses the methods that will be used in the collection and analysis of data to the basic questions of the study. It explains the research approach, types and sources of data, sampling techniques and data collection methods used; and describe how data collected from the research has been analyzed.

3.1. Research Design

The research design is a blueprint that specifies the study variables and commences with a plan of selecting the sources and forms of information used to answer the research question (Saunders et.al, 2009). The research employed an explanatory and descriptive study design. Explanatory study designs are important in answering the "how" questions. These study designs try to explain how a variable affects another. An explanatory research design was utilized because the study is supposed to establish the effect of the internal control system in fraud detection and prevention. While Descriptive design was utilized in the study because it permits adequate and correct data collection for research and facilitates careful generalization of outcomes. In Hibret Bank, for instance, the survey was conducted to assess whether the internal control system is effective in minimizing fraud risks.

3.2. Research Approach

Research approaches, according to Cresswell (2014), are strategies and processes for conducting research that go from general hypotheses to specific techniques for gathering, analyzing, and interpreting data.

In order to assess how well internal control systems, mitigate fraud risks, this study used a quantitative approach, taking into account a number of variables including the bank environment, risk assessment, control activities, information and communication, and monitoring activities. Besides, qualitative data were collected through interviews.

3.3. Population Size

A population, according to Mugenda and Mugenda (2003), is the entire group of people, cases, or objects that share some observable traits. The study's target populations were the staff

members of Hibret Bank at the Head Office and its Branches which are located in Addis Ababa. As per the Bank's Human Capital Management Department information the total population of the research was 5508.

Place of Work	Managerial Staff	Clerical Staff	Non-clerical Staff	Total
Head Office	159	386	217	762
North Addis Ababa District	115	358	132	605
East Addis Ababa District	121	316	109	546
West Addis Ababa District	119	320	140	579
South Addis Ababa District	111	275	90	476
Total	625	1655	688	2968

Source: Human Capital, Hibret Bank S.C. as of December 01, 2024

3.4. Sample Method and Sampling Technique

The sample that was used for this study comprised the managerial employees of the Bank who are currently working at Head Office and Addis Ababa Branches. Purposive sampling was used to select the participants of the study for the Bank's employees who are working in managerial positions with total number of 625 as of December 01, 2024. The respondents were selected based on simple random sampling for this study in order to ensure that all the managerial employees were well represented in the study and all of them were given equal chance of being selected to participate in the study as respondents.

A sample is a subset of individuals from a population to estimate the characteristics of whole population (Singh and Masuku, 2014). According to them, the two main advantages of sampling are the faster data collection and lower cost. Sample size determination is the technique of selecting the number of observations to include in a sample. Yamane (1967) formulated the following simplified formula to calculate sample sizes.

The formula formulated by Yamane (1967) for sample size calculation is:

$$n = \frac{N}{1 + N \cdot e^2}$$

Where; n= Sample Size

N= Population size

E² = square of the maximum allowance for error between the true proportion and the sample proportion.

$$n = \frac{625}{1 + 625(0.05 \times 0.05)} = 244$$

Therefore, the sample size for targeted population of the study was 244 employees who were working on the managerial positions of the Bank.

3.5. Data collection method

The study used primary data. These data was collected specifically for the purpose of the research work or could be described as those data that were observed and recorded for the first time. The research used primary data that were obtained by undertaking self-administered questionnaire to the Bank's staffs.

The questionnaire that was employed for this study was closed ended. And, the survey study employed Likert scale questionnaires as the primary data collection instrument. The questionnaire was organized in a sections, each addressing a specific aspect of the research topic. Each section consisted of a sufficient number of questions to comprehensively capture the participants' opinions, attitudes, or perceptions related to the effectiveness of the internal control systems in mitigating fraud risks in the case of Hibret Bank.

By using Likert scale questionnaires, the research tries to collect quantitative data that is simple to analyze and interpret. Likert scale allows respondents to indicate their level of agreement or

disagreement with a statement or question, depending on whether they strongly agree or strongly disagree, they just select their response. This structured response format facilitates quantitative analysis and helps researchers gather more nuanced data compared to simple yes/no questions.

Organizing Likert scale items into different sections makes the survey easier, clear, and enables data analysis to be improved. It becomes easy for participants to answer questions easily and accurately, while for researchers, it becomes easy to analyze answers according to specific topics or constructs.

By including a sufficient number of questions in each section, the research aimed to capture a wide range of opinions and variations within the participants' responses. This helps to enhance the reliability and validity of the data collected, as it reduces the potential for response bias and provides a more accurate representation of the participants' views.

Overall, the use of Likert scale questionnaires organized into six sections with sufficient questions in each section ensures a comprehensive and robust data collection process, enabling the research to obtain valuable insights into the research topic.

3.6. Data Analysis

To analyze the data obtained using questionnaires, the study used the descriptive and inferential statistics approach. Frequency, standard deviation, and mean scores were the specific descriptive statistics used. Regression analysis was one of the specific inferential statistics methods employed in the research. The study used the SPSS Version 25 program to analyze the survey and present the findings.

3.7. Reliability and Validity Tests

3.7.1. Reliability

To ensure reliability of instruments, a pilot survey was conducted to ensure the reliability of the questionnaire. Accordingly, 20 questionnaires were distributed to Hibret Bank staffs who are not part of the sample and the reliability of the instrument was tested using Cronbach's Alpha (α) test, where values 0.9 or higher indicate excellent reliability, values starting from 0.8 to .89 indicate good reliability, values starting from 0.7 to .79 indicate acceptable reliability, values starting from 0.6 to .69 indicate questionable reliability, values starting from 0.5 to .59 indicate poor reliability, George and Mallery (2010). With the aid of SPSS 25, Cronbach Alpha (α) test was conducted on all the constructs with multiple items to check if the benchmark of 0.70 was adhered to. The table below displayed the result:

Table 3.1: Internal Consistency Results of Composite Reliability

Construct	No of items	Cronbach Alpha (α)	Internal Reliability
Control Environment	5	0.828	Good
Risk Assessment	5	0.776	Acceptable
Control Activities	5	0.769	Acceptable
Information and Communication	5	0.894	Good
Monitoring Activities	5	0.775	Acceptable
Mitigation of Fraud Risks	10	0.764	Acceptable

As it is shown in the table, all the Cronbach's Alpha (α) values exceeded the recommended value of 0.70 indicating an acceptable internal consistency. Thus, the items on each construct of the study were reliable.

3.7.2. Validity

Validity refers to the degree to which a data collection tool measures what it should measure is known as validity. The questionnaire served as the test instrument in this investigation.

Questionnaires are deemed valid if they gather the data from the respondents that the study aims to collect . Before using the actual data gathering tool, a pilot test was carried out to confirm its Validity. The pilot test findings were used to eliminate ambiguities, to improve the data gathering tools, and raise the level of instruments to increase the level of the instrument_s validity. The questionnaires were shared with two professionals to assess the validity of the questions in light of its aims. The questionnaire evaluation was followed by any needed changes that took into an account the study goals.

A content validity index (CVI) was computed using the following formula, $CVI = \text{No of questions declared valid} / \text{Total no of questions in the questionnaire}$

Table 3.2 : Content Validity for the Questionnaire

Construct	Expert 1	Expert 2	Average
Control Environment	0.85	0.95	0.90
Risk Assessment	0.90	0.90	0.90
Control Activities	1.00	0.90	0.95
Information and communication	0.95	0.95	0.95
Monitoring Activity	0.93	0.89	0.91
Mitigation of Fraud Risks	0.86	0.93	0.90
Average	0.92	0.92	0.92

As shown in the table, CVI 0.86 which is greater than 0.80 (threshold) the research, the instrument is considered Valid.

3.8. Ethical Consideration

The research study followed ethical guidelines and data confidentiality. In order to maintain confidentiality of the respondent information, coded identifiers were used instead of personal

identification questions. The participants were well informed about the purpose of the study, the reason why they were selected and that their responses would be treated in a confidential manner. All the authors who were utilized in the study were well credited by citing and referencing their works. The results were generalized in nature in order to protect the privacy of participants. The integrity in the course of undertaking the research was upheld in the sense that the data collection, presentation, analysis and interpretation of the research was dependent on the results that were obtained. Data management involved the summary of quantitative findings through descriptive statistics in terms of percentages, means, and inferential measures in terms of correlations and regression coefficients.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

INTRODUCTION

This section explains the analysis and findings of the research. The overall aim of the study was to gather data that would provide a more complete representation for assessing the effectiveness of Internal Control Systems in reducing Fraud Risks in the context of Hibret Bank. The data was analyzed and presented utilizing frequencies, percentages, and tabular charts. The study collected its data from the management staff of the bank. The questionnaire targeted five areas, namely the profile of the respondents, fraud types, an assessment of how effective internal control systems are in reducing fraud risk, and an assessment of the prevalence of the various types of fraud. The study utilized the SPSS 25 statistical package to conduct descriptive and inferential analysis.

4.1. Response Rate of Respondents

Table 4.1: Response Rate

Questionnaire	Frequency	Percentage
Returned	232	95.08
Not Returned	12	4.92
Total	244	100.00

Data based on surveys (2024)

As revealed in the table above, of the 244 questionnaires issued to the respondents, 232 were returned, thus the 95.08% response rate. Conversely, 12 questionnaires were not returned, and these constituted 4.92%. All the questionnaires that were returned were well completed and utilized for the analysis procedure. According to Mugenda and Mugenda (2003), this response rate was excellent as it represents and conforms to a response rate of 50% is adequate for analysis; a response rate of 60% is good and a response rate of 70% and over is excellent.

4.2. Demographic Profile of Respondents:

Table 4.2: Demographic Profile of Respondents

Profile	Category	Frequency	Percent
Gender	Male	143	61.6
	Female	89	38.4
Age	26-35 years	62	26.7
	36-45 years	101	43.5
	46-55 years	45	19.4
	Above 56 years	24	10.3
Educational Background	First Degree (BSc, BA)	91	39.2
	Second Degree (MSc, MA)	141	60.8
Job position	Branch Manager	87	37.5
	Assistant Manager	65	28.0
	Division Head	32	13.8
	Section Head	29	12.5
	Director	19	8.2
Job tenure (Experience)	1 to 3 years	7	3.0
	4 to 6 years	46	19.8
	7 to 9 years	59	25.4
	Above 10 years	120	51.7

4.2.1. Gender Distribution of Respondents

Among the 232 respondents, the male respondents were 143 which comprise 61.6% and the remaining 89 of them were female which comprises 38.4% of the total respondents.

4.2.2. Age Distribution of Respondents

Regarding the age distribution of the respondents of the study, 26.7% (62 out of 232) were within the age group of 26-35 years; 43.5% (101 out of 232) of the respondents were within the age group of 36-45 years; 19.4% (45 out of 232) of the respondents were within the age group of 46-55 and 10.3% (24 out of 232) of the total respondents were 56 and above of the total respondents respectively. The employees who are within the age range of 36-45 years old are the most respondents of the study.

4.2.3. Educational Qualification of Respondents

Regarding the educational background of the respondents, those who have first degree comprises 39.2% (91 out of 232) and those who have second degree comprise of 60.8% (141 out of 232) of the respondents. However, no respondent was found with Diploma and a third degree (Ph.D) qualifications.

4.2.4. Position Held by Respondents

With regards to the position held by respondents in the bank, 37.5% (87 out of 232) were Branch Managers, 28.0% (65 out of 232) were Assistant Branch Managers, 13.8% (32 out of 232) were Division Head, 12.5% (29 out of 232) were Section Heads, and 8.2% (19 out of 232) were Directors respectively. The employees responded from all the positions who could effectively evaluate the internal control systems in the case of mitigating fraud risk.

4.2.5. Job Tenure of Respondents

Regarding the work experience of the respondents in the bank, 3.0% (7 out of 232) had between 1-3 years working experience with the bank, 19.8%% (46 out of 232) had between 4-6 years of working experience with bank, 25.4% (59 out of 232) of the respondents had work experience in the bank for 7-9 years, and 51.7% (120 out of 232) had 10 years and above work experience

respectively. Most of the respondents have 10 or above years of experience in the banking profession.

4.3. Level of Frequency of Types of Frauds

Table 4.3: The Frequency of the Types of Frauds

Types of Frauds	Mean	Std. Deviation
Theft and Embezzlement	2.65	1.263
Defalcation	2.69	1.252
Unofficial Borrowing	2.40	1.299
Foreign Exchange Malpractices	2.71	1.352
Impersonation	2.62	1.281
Manipulation of Vouchers	2.61	1.281
Falsification of Status Report	2.55	1.272
Fake Payments	2.40	1.262
Forgeries	2.57	1.260
Computer Frauds	2.34	1.306
Average	2.55	1.28

Mean and standard deviation give very useful information regarding the central tendency and variability of fraud levels across categories. If we consider the mean figures, Foreign Exchange Malpractices exhibit the highest average level of 2.71, followed closely by Defalcation at 2.69. Computer Frauds exhibit the lowest average fraud level at 2.34.

In examining the standard deviation of the dispersion of values expressed in terms of the mean, it can be observed that Foreign Exchange Malpractices have the most variability in fraud behaviors, as suggested by the standard deviation of 1.352. This shows that there is a broader

range of fraud levels associated with Foreign Exchange Malpractices than with other groups. On the other hand, Defalcation boasts the smallest standard deviation of 1.252, indicating lesser variability in fraudulent activity under this category. In general, these statistical findings offer useful information on the average level of fraud under each category, in addition to the degree of variability or uniformity in fraud occurrence in the various classifications.

4.4. The Extent of the Internal Control Systems in Hibret Bank

The first objective of the study was to evaluate the effectiveness of internal control systems in mitigating fraud risk in Hibret Bank as perceived managerial staffs.

4.4.1. Control Environment

Table 4.4: Control Environment in Mitigating Fraud Risk

No	Item	Mean	S.D	Mean Interpretation
1	The bank has clear objectives	3.98	1.224	Agree
2	The management communicates the objectives so as to provide effective direction to employees.	3.75	1.199	Agree
3	There is significant compliance in operational and financial rules and regulations	3.56	1.271	Agree
4	The bank has a culture, code of conduct that rewards performance systems that support the business objectives.	3.61	1.254	Agree
5	The management demonstrates, through its actions and policies the commitment to competence, integrity and trust.	3.52	1.276	Agree
	Average	3.68	1.25	Agree

As showed in the table, the respondents agree with —the bank has clear objectives‖ with mean of 3.98 and SD of 1.224; —management communicates the objectives so as to provide effective direction to employees‖ with mean of 3.75 and SD of 1.199; regarding on —culture and code of conduct‖, the result shows staffs agreement with mean of 3.61 and SD of 1.254; —compliance in operational and financial rules and regulations‖ with mean of 3.56 and SD of 1.271 of staffs agreement and regarding on —the management’s commitment to actions and policies‖ staffs have shown agreement with mean 3.52 and standard deviation 1.276. Thus, the construct labeled "Control Environment" provided a mean score of 3.68 overall, reflecting a point of concurrence and hence an indication that the bank's control environment is largely strong.

4.4.2. Risk Assessment

Table 4.5: Risk Assessment in Mitigating Fraud Risk

No	Item	Mean	S.D	Mean Interpretation
1	The Board has clear strategies for dealing with the significant risks of frauds occurring	3.66	1.286	Agree
2	There are policies on how to manage these risks	3.70	1.221	Agree
3	Risks of frauds occurring are identified and assessed on an on-going basis	3.55	1.241	Agree
4	Authority, responsibility and accountability are clearly defined in the bank	3.87	1.182	Agree
5	The management have the knowledge, skills and tools to effectively manage risks to the achievement of their objective	3.63	1.184	Agree
	Average	3.68	1.2228	Agree

As showed in the table, regarding on —authority, responsibility and accountability are clearly defined in the bank with mean of 3.87 and SD of 1.182; on —policies on how to manage these risks, the respondents agreed with mean of 3.70 and SD of 1.221; on —the board has clear strategies for dealing with significant risks of fraud occurring respondents agreement has shown mean of 3.66 and SD of 1.286; the respondents agreement on —the management has the knowledge, skills and tools to effectively manage risks to the achievement of their objective, showed mean of 3.63 and SD of 1.184 and the —risks of frauds occurring are identified and assessed on an on-going basis has the respondents agreement with mean of 3.55 and SD of 1.241. In general, the staffs SD evaluation of the —Risk Assessment — had average mean of 3.68 which implies that risk assessment in mitigating fraud risk is strong in the Bank.

4.4.3. Control Activities

Table 4.6: Control Activities in Mitigating Fraud Risk

No	Item	Mean	S.D	Mean Interpretation
1	The bank communicates to its employees what is expected of them and the scope of their freedom to act.	3.66	1.192	Agree
2	The management follows the bank rules, regulations, procedures in recruitment of employees.	3.59	1.199	Agree
3	The employees in the bank have the knowledge, skills and tools to support the achievement of the bank objectives.	3.65	1.145	Agree
4	There is proper segregations of duties	3.56	1.229	Agree
5	There is proper authorization and Approval of transactions.	3.81	1.223	Agree
	Average	3.65	1.198	Agree

As showed in the table, the respondents agreed on —proper authorization and approval of transactions with mean of 3.81 and SD of 1.223; regarding on —the bank communicate to its employees what is expected of them and the scope of their freedom to act, the respondents agreed with mean of 3.66 and SD of 1.192; in the case of —having the knowledge. Skills and tools to support the achievement of the objectives of the Bank, the respondents agreed with mean of

3.65 and SD of 1.145; the respondents agreed with mean of 3.59 and SD of 1.199 when assessing —management follows the bank rules, regulations, procedures‖ and respondents had the lowest agreement regarding —the existence of proper segregations of duties‖ in the bank with mean of 3.56 and SD of 1.229 respectively. Overall, the respondents' evaluation of the control activities component of the internal control systems in the Bank had average mean value of 3.65 which indicates that the component was effective in mitigating fraud risk.

4.4.4. Information and Communication

Table 4.7: Information and Communication in Mitigating Fraud Risk

No	Item	Mean	S.D	Mean Interpretation
1	The management receives timely, relevant and reliable reports on progress against the bank objectives.	3.62	1.148	Agree
2	The management receive timely, relevant and reliable reports on indicators of change, such as employee attitudes etc.	3.33	1.236	Neutral
3	The information needs and related information systems are reassessed to meet objectives.	3.44	1.172	Neutral
4	The periodic reporting procedures are effective in Communicating accounts of the bank position and prospects.	3.59	1.181	Agree
5	There are established channels of communication for Individuals to report suspected breaches of laws or regulations.	3.59	1.319	Agree
	Average	3.514	1.2112	Agree

As it is shown in the table, the respondents have the highest agreement on —the management receives timely, relevant and reliable reports on progress against the bank's objectives‖ with mean of 3.62 and SD of 1.148 and in the cases of —the existence of channels of communication for individuals to report suspected breaches of laws or regulations‖ and —the effectiveness of periodic reporting procedures in communicating accounts of the bank position and prospects‖, the respondents showed agreement with similar means of 3.59 and SDs of 1.319 and 1.181

respectively. Regarding —the reassessment of the information needs and related information systems to meet the Bank’s objectives‖ and —the timely receiving of relevant and reliable reports on indicators of change such as employee attitudes by the management‖, the respondents had neutral positions with means of 3.44 and 3.33 and SDs of 1.172 and 1.236 respectively.

Overall, the component —Information and Communication‖ has been evaluated with average mean of 3.514 and SD of 1.211 which implies that the Bank had strong means of using information and communication in its controlling systems.

4.4.5. Monitoring Activities Table

Table 4.8: Monitoring Activities in Mitigating Fraud Risk

No	Item	Mean	S.D	Mean Interpretation
1	There are on-going processes, which monitor the effective application of the policies, process	3.57	1.197	Agree
2	Such processes may include control self-assessment, confirmation by personnel of compliance with policies and codes of conduct.	3.55	1.198	Agree
3	There are effective follow-up procedures to ensure that appropriate action or changes against defaulters	3.47	1.258	Neutral
4	There are appropriate communication to the Board on the effectiveness of the on-going monitoring processes	3.35	1.186	Neutral
5	The monitoring personnel report any significant failure or weaknesses on a timely basis.	3.38	1.232	Neutral
	Average	3.464	1.2142	Neutral

Concerning the Monitoring activities , the results in the table indicated that the respondents have the highest agreement on —the ongoing processes which monitor the effective application of the policies, process‖ with mean 3.57 and SD of 1.197; in the case of —processes that include self-assessment, confirmation by personnel of compliance with policies and codes of conduct‖, the respondents have agreed with mean 3.55 and SD of 1.198; the respondents had given neutral responses for the statements the existence of effective follow-up procedures to ensure that appropriate action or changes against defaulters‖, reporting of significant failure or weaknesses

on a timely basis by the monitoring personnel and the existence of appropriate communication to the Board on the effectiveness of the on-going monitoring processes with means 3.47, 3.38, and 3.35 and SDs 1.258, 1.232 and 1.186 respectively.

The overall average mean of all the five constructs was 3.464 which implies that the employees had neutral positions about the Bank's monitoring activities.

4.5. The Presence or Occurrence of Frauds in Hibret Bank S.C.

Table 4.9: Assessment of common frauds in Hibret Bank

No	Item	Mean	S.D	Mean Interpretation
1.	Theft and embezzlement are common in Hibret Bank.	1.63	.883	Disagree
2.	Defalcation is a major problem in the Hibret Bank.	1.50	.853	Disagree
3.	Unofficial borrowing is a common practice in Hibret Bank.	1.49	.816	Strongly Disagree
4.	Foreign exchange malpractices are prevalent in Hibret Bank.	1.66	.990	Disagree
5.	Impersonation is a serious issue in Hibret Bank.	1.58	.950	Disagree
6.	Manipulations of vouchers occur frequently in Hibret Bank.	1.49	.806	Strongly Disagree
7.	Falsification of status reports is a common practice in Hibret Bank.	1.55	.877	Disagree
8.	Fake payments are a major concern in Hibret Bank.	1.53	.842	Disagree
9.	Forgeries are a significant problem in Hibret Bank.	1.53	.897	Disagree
10.	Computer frauds are a serious threat in Hibret Bank.	1.48	.863	Strongly Disagree
	Average	1.54	.878	Disagree

Relative frequency and seriousness of each type of fraud are determined by analysis of the mean values of ten fraud indicators.

As presented in the table, the average score of all items is 1.54, which falls within the "Disagree"

category (1.50–2.49). This means that, at the general level, employees do not emphatically hold the view that fraud is a very common problem in the Bank. Though, some categories of fraud are of comparatively greater concern than others.

The most frequent categories of fraud according to their higher mean scores are ,

Foreign exchange malpractices (mean=1.66)

Theft and embezzlement (mean=1.63)

Impersonation (mean=1.58)

Even still it's in the —Disagree category its comparatively in a higher ratings that indicates the topics which might need a special attention and investigation.

The least frequent types of fraud based on lower mean scores are:

Computer frauds (mean=1.48)

Unofficial borrowing (mean=1.49)

Manipulations of vouchers (mean = 1.49)

These falls in the "Strongly Disagree" category, suggesting that employees tend not to perceive these problems as occurring quite often at the bank. The other fraud categories such as defalcation, falsification of records, false disbursements, and forgeries also rated moderate levels (1.50 to 1.55), which reflect low to moderate concern.

Even though overall outcomes show a low perception of fraud risk, the relatively higher concern for certain categories such as foreign exchange irregularity and theft signify that risk management controls and internal controls specific to some sectors need to be continued or strengthened in the concerned areas. Periodic training, auditing, and awareness campaigns are also needed to continue the low rate of fraud and further improve an effective anti-fraud culture in the bank.

4.6. The Relationship between Internal Control Systems and types of Bank Frauds

4.6.1. Correlation Analysis

This research uses correlation analysis to examine the magnitude of relationships among variables of interest. For determining convergent validity, Pearson correlation analysis was used. Pearson correlation coefficients explain the direction and the size of these relationships, either positive or negative, as well as the strength of the relationship between -1.0 and +1.0. Correlations can be viewed as simple yet highly pragmatic measures of the relationship between two or more variables (Marczyk, Dematteo, and Festinger, 2005).

For each variable being examined, a correlation analysis through the application of Pearson's correlation coefficient (r) was employed to examine the interconnectedness of the internal control systems' components and instances of fraud in the Bank. To shed light on the strength of the variables' relationships, guidelines provided by Field (2005) were adopted, particularly due to their ease of use. He categorizes the correlation coefficient (r) as follows: 0.1–0.29 as weak; 0.3–0.49 as medium; and above 0.5 as strong.

Internal Correlations among Control Components

The results show statistically significant and positive correlations among all internal components of the control system, which means that components tend to be reinforcing one another. Specifically:

Control Environment (CE) correlated strongly with:

Risk Assessment (RA) ($r = 0.571$, $p < 0.01$)

Control Activities (CA) ($r = 0.554$, $p < 0.01$)

Monitoring Activities (MA) ($r = 0.527$, $p < 0.01$)

Moderate relationship with Information and Communication (IC) ($r = 0.444$, $p < 0.01$)

Risk Assessment (RA) showed high relationship with:

Control Activities (CA) ($r = 0.555$, $p < 0.01$)

Information and Communication (IC) ($r = 0.651$, $p < 0.01$)

Monitoring Activities (MA) ($r = 0.624$, $p < 0.01$)

Control Activities (CA) showed high relationship with:

Information and Communication (IC) ($r = 0.583, p < 0.01$)

Monitoring Activities (MA) ($r = 0.562, p < 0.01$)

Information Communication. (IC) and Monitoring Activities (MA) were also highly correlated ($r = 0.585, p < 0.01$)

These findings confirm that the components of internal control are interdependent, and improvement in one component is most likely to be associated with improvement in others.

Correlations among Internal Controls and Fraud

All the components have extremely high and negative correlations with fraud, indicating that stronger internal control mechanisms are associated with lower fraud:

Risk Assessment (RA) showed the strongest negative correlation with fraud ($r = -0.730, p < 0.01$), emphasizing the role of effective risk assessment in anti-fraud initiatives.

Information and Communication (IC) ($r = -0.714, p < 0.01$) and Monitoring Activities (MA) ($r = -0.688, p < 0.01$) also exhibited important negative correlations with fraud.

Control Environment (CE) ($r = -0.687, p < 0.01$) and Control Activities (CA) ($r = -0.668, p < 0.01$) were also found to have significant preventive effects.

These results underscore the importance of a fully integrated and robust internal control system to reduce fraud risks. Among all the factors, Risk Assessment is the most important variable in averting frauds and suggests the necessity for active identification and control of risks in banking operations.

Table 4.10: Pearson Correlation Matrix between Internal Control components and Types of Fraud Risks.

Correlations

		CE	RA	CA	IC	MA	Fraud
CE	Pearson Correlation	1	.571**	.554**	.444**	.527**	-.687**
	Sig. (2-tailed)		0	0	0	0	0
	N	232	232	232	232	232	232
RA	Pearson Correlation	.571**	1	.555**	.651**	.624**	-.730**
	Sig. (2-tailed)	0		0	0	0	0
	N	232	232	232	232	232	232
CA	Pearson Correlation	.554**	.555**	1	.583**	.562**	-.668**
	Sig. (2-tailed)	0	0		0	0	0
	N	232	232	232	232	232	232
IC	Pearson Correlation	.444**	.651**	.583**	1	.585**	-.714**
	Sig. (2-tailed)	0	0	0		0	0
	N	232	232	232	232	232	232
MA	Pearson Correlation	.527**	.624**	.562**	.585**	1	-.688**
	Sig. (2-tailed)	0	0	0	0		0
	N	232	232	232	232	232	232
Fraud	Pearson Correlation	-.687**	-.730**	-.668**	-.714**	-.688**	1
	Sig. (2-tailed)	0	0	0	0		
	N	232	232	232	232	232	232

1. Correlation Analysis of CE with fraud detection and prevention

Hypothesis 1:

H1: Control Environment has a positive and significant relationship with fraud prevention and detection dimensions of HB.

H0: Control Environment possesses a negative and non-significant relationship with fraud prevention and detection practices of HB.

The outcome on the Table 4.9 above indicates that, the control environment has a moderately strong negative correlation with Fraud (-0.687**), which is statistically significant at the 0.01 level (2-tailed). This implies that the controlling environment of the bank is sound in reducing the prevalent fraud risks in the bank. Thus, the null hypothesis (H0) is rejected.

2. Correlation Analysis between RA with Fraud Prevention and Detection

Hypothesis: 2

H1: RA has a positive and significant effect on fraud detection and prevention areas of HB.

H0: RA has a negative and insignificant relationship regarding fraud prevention and detection dimensions in HB.

As shown in the above Table 4.9, the correlation coefficient result is significantly negatively correlated with Fraud (- 0.730**), and at the 0.01 level (2-tailed) significance. This implies that, with an increase in RA, fraud prevention and banks' detection of fraud also rise. Therefore, the null hypothesis (H0) is rejected.

3. Correlation Analysis of CA with Fraud Prevention and Detection

Hypothesis: 3

H1: CA has a positive and significant relationship with fraud prevention and detection aspects of HB.

H0: CA has a negative and insignificant relationship on fraud prevention and detection aspects of HB.

From the above table 4.9, it can be seen that it has a moderately strong negative correlation with Fraud (-0.668**), which is statistically significant at the 0.01 level (2-tailed). This implies the presence of moderate positive relationship between CA and Fraud Prevention and Detection in Hibret Bank S.C. This implies that, when CA increase's fraud prevention and detection of the Bank also increase. Therefore, the null hypothesis (H0) is rejected.

4. Correlation Analysis of Internal Control and Fraud Prevention and Detection

Hypothesis: 4

H1: IC has positive and significant associations with fraud prevention and detection dimensions of HB.

H0: IC has a negative and insignificant association with fraud prevention and detection dimensions of HB.

From the given table 4.9, it is observed that IC has a moderately strong negative correlation with Fraud (-0.714**), also significant at the 0.01 level (2-tailed). This indicates that the Bank's information and communication are effective in mitigating the prevailing fraud risks in the Bank. Therefore, the null hypothesis (H0) is rejected.

5. Correlation Analysis of IC and MA with Fraud Detection and Prevention

Hypothesis: 5

H1: MA has a positive and significant relationship with HB fraud prevention and detection aspects.

H0: MA is negatively and insignificantly correlated to HB's fraud prevention and detection areas.

The table data indicates that Monitoring Activities (MA) exhibit a moderately strong negative relationship with Fraud (-0.688**), statistically significant at the 0.01 level (2-tailed). This indicates that monitoring activities by the Bank are effective in curbing extensive fraud risks in the bank. The null hypothesis (H0) is thus rejected.

4.7. The Effect of Internal Control Systems in Mitigating Fraud Risk in Hibret Bank

4.7.1. Assumptions Tests

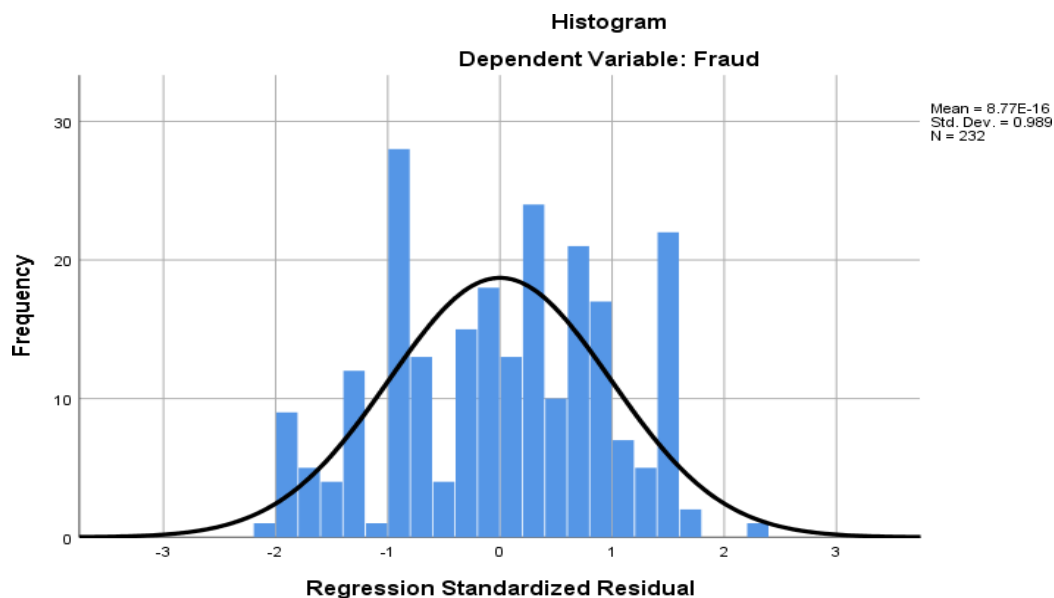
We need to check whether all the assumptions required by the model are met prior to conducting inference. Normality was assumed while constructing the regression models, no or minimal multicollinearity, and no auto-correlation.

4.7.1.1. Sample Size

Different statisticians and researchers tend to give different guidelines concerning the number of cases required for multiple regressions. Tabachnick & Fidell (2001), give a formula for calculating sample size requirements, taking into account the number of independent variables to use: $N > 50 + 8m$ (where m = number of independent variables). In this study five independent variables were existed and cases were 232. Therefore, the study fulfilled sample size assumption.

4.7.1.2. Normality Assumption

Figure 4.1 Normality Curve



The mean value of 8.77 E-16 (8.77×10^{-16}) and the standard deviation of 0.989 are indicators of the normality test results for the data. In this context, the mean value close to zero (8.77 E-16 is essentially zero in scientific notation) recommends that the data is centered on zero, which is a

common characteristic of normally distributed data.

The standard deviation of 0.989 expresses the amount of variation or dispersion of the points from the mean. The figure of a standard deviation of 0.989 is quite near 1, which is the figure usually present in data that is normally distributed. This is an indication that data points are not very spread out from the mean and are quite concentrated around it.

In conclusion, given the mean value close to zero and standard deviation of 0.989, it can be concluded that data has properties of an approximate normal distribution. This conclusion is drawn from the fact that the mean is around zero and the data points have little depression from this central tendency.

4.7.1.3. Multicollinearity Test

Table 4.11: Multicollinearity of Determinant Factors

		Collinearity Statistics	
		Tolerance	VIF
	(Constant)		
	Control Environment	.575	1.740
	Risk Assessment	.435	2.301
	Control Activity	.522	1.917
	Information & communication	.482	2.075
	Monitoring Activities	.503	1.987

Before running regression, one should check for the problem of multicollinearity, which is present if there is a high correlation between some of the independent variables. The study checked multicollinearity using the tolerance and the Variance Inflation Factor (VIF) outputs.

Tolerance is a measure of how much of the variance of an independent variable is not explained by the other independent variables. A tolerance value close to 1 indicates that there is little

multicollinearity. As it is indicated in the above table, all the tolerance values are relatively close to 1, indicating that there is no issue with multicollinearity.

The Variance Inflation Factor (VIF) is the reciprocal of the tolerance and it measures how much the variance of an estimated regression coefficient will increase because of multicollinearity. VIF values less than 10 generally indicate no issues with multicollinearity. As indicated the above table, all the VIF values are less than 10, further indicating that there will not be a significant multicollinearity issues among the independent variables.

4.7.2. Regression Analysis and Research Questions

For the purposes of determining the extent to which the explanatory variables (internal control) elements such as the control environment, risk assessment, control activities, information and communication, and monitoring activities) explain the variance in the explained variable (fraud risks) in mitigating those risks, regression analysis was employed after the study met the regression assumptions. The significance level of 0.05 with a 95% confidence interval was used.

The combined effect of the independent variables on the dependent variable was detected using multiple regression analysis. The result has been shown in the table below.

4.7.2.1. Model Summery

Table 4.12: Model Summery

Model	R	R Square	Adjusted R Square	Error of the Estimate	Durbin-Watson
1	.867 ^a	.751	.745	.261	2.021
a. Predictors: (Constant), Monitoring Activities, Control Environment, Information & communication, Control Activity, Risk Assessment					
b. Dependent Variable: Fraud Risks					

The model summary output gives an overview of the regression model's performance in predicting the dependent variable (Fraud Risks) based on the predictors (Monitoring Activities, Control Environment, Information & Communication, Control Activities, and Risk Assessment). The multiple correlation coefficient (R) value of 0.867 indicates a strong positive linear relationship between the predictors and the dependent variable. It shows how well the predictors collectively explain the variation in the dependent variable.

The R Square value of 0.751 that represents the proportion of variance in the dependent variable (fraud risks) that can be explained by the predictors (Monitoring Activities, Control Environment, Information & Communication, Control Activities, and Risk Assessment). In this case, approximately 75.1% of the variance in fraud risks can be accounted for by the predictors in the model. And, the rest 24.9% could be explained by other factors.

Generally, this model summary output suggests that the predictors (Monitoring Activities, Control Environment, Information & Communication, Control Activities, and Risk Assessment) cooperatively explain a significant portion of the variance in mitigating fraud risks within the Bank. The high R Square value indicates that these predictors are effective in predicting and understanding fraudulent activities within the organization.

4.7.2.2. Analysis of Variance (ANOVA)

Table 4.13: ANOVA Result for Regression Model

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	46.501	5	9.300	136.221	.000 ^b
	Residual	15.430	226	.068		
	Total	61.931	231			
a. Dependent Variable: Fraud						
b. Predictors: (Constant), Monitoring Activities, Control Environment, Information & communication, Control Activity, Risk Assessment						

As shows in the table, the F-statistic of 136.221 in the ANOVA output for the five components of internal control systems (control environment, risk assessment, control activities, information and communication, and monitoring activities) in mitigating fraud risks in Hibret Bank that measures the overall significance of the relationship between these components and their impact on fraud risks.

In this case, a high F-statistic of 136.221 suggests that there is a significant relationship between the five components of internal control systems and their effectiveness in mitigating fraud risks in Hibret Bank. This means that at least one of the components (control environment, risk assessment, control activities, information and communication, or monitoring activities) has a significant impact on fraud risks within Hibret Bank.

Therefore, based on the F-statistic result, it can be concluded that the internal control systems, specifically the five components mentioned, play a significant role in mitigating fraud risks in Hibret Bank. It indicates that these components collectively contribute to reducing the likelihood of fraudulent activities within the organization.

4.7.2.3. Regression Coefficient

Table 4.14: Multiple Regressions of Internal Control Elements on Mitigating Fraud Risks

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.852	.092		41.730	.000		
	Control Environment	-.158	.025	-.279	-6.361	.000	.575	1.740
	Risk Assessment	-.125	.031	-.206	-4.085	.000	.435	2.301
	Control Activity	-.093	.030	-.144	-3.131			
	Information & communication	-.169	.030	-.271	-5.666	.000	.482	2.075
	Monitoring Activities	-.104	.028	-.174	-3.711	.000	.503	1.987
a. Dependent Variable: Fraud Risks								

Table 4.7.2.3 presents the result of a multiple linear regression analysis conducted to test the relationship between the five components of internal control and their role in mitigating fraud risks at Hibret Bank. Fraud risks constitute the dependent variable for the model, while the independent variables are the five components of internal control: Control Environment, Risk Assessment, Control Activities, Information and Communication, and Monitoring Activities.

The unstandardized coefficients mean the change in the dependent variable (fraud risks) by a unit change of the corresponding independent variable when all other variables are controlled. The Control Environment coefficient is, say, -0.158, indicating that a one-unit improvement in Control Environment is associated with a -0.158 units decrease in fraud risks when everything is held constant. Also, their improvements in Risk Assessment (-0.125), Control Activities (-0.093), Information and Communication (-0.169), and Monitoring Activities (-0.104) assist in reducing fraud risks.

The standardized Beta coefficients show the relative contribution of each predictor variable in the model. The coefficients are particularly useful when comparing the effect of variables with varied scales. For this model:

- Control Environment has the highest absolute Beta value ($\beta = -0.279$), indicating that it is the most efficient factor to counteract fraud risks.
- Next is Information and Communication ($\beta = -0.271$), showing its significant impact.
- Risk Assessment ($\beta = -0.206$), Monitoring Activities ($\beta = -0.174$), and Control Activities ($\beta = -0.144$) are also significant, though to a lesser extent.

The negative signs for all the Beta coefficients show that improvement in each of the internal control components is associated with reductions in fraud risks.

All independent variables have p-values (Sig.) less than 0.005, indicating that their relationships with fraud risks are statistically significant at the 0.05 level. This confirms the relevance of all five components of internal control in the model and supports the hypothesis that these elements play a critical role in mitigating fraud risks.

The tolerance values of all the predictors are greater than 0.4, and the VIF values are below the commonly accepted value of 5. This means that no multicollinearity issue is present in this model, i.e., the independent variables are not depicting high levels of correlation with each other.

The findings reinforce that all the five components of internal controls are important in mitigating Hibret Bank's fraud risk. Of the five, Control Environment has been identified as the best predictor and is indicative of building an ethical and governance culture. The Information and Communication component is also a critical component whereby it has been indicated that information flows that are timely and transparent are of utmost importance in the prevention of fraud. Although the effects shown by Monitoring Activities and Control Activities are not strong, statistically significant effects confirm the need for highly coordinated and integrated internal control system.

These conclusions emphasize that enhancing internal control systems can be a powerful strategy in reducing fraud risks. The company should place emphasis on the strengthening of the climate for control and communication procedures with robust practices in risk oversight, evaluation, and a control activity.

4.8. Analysis of Qualitative Data

The research thematic analysis of qualitative interview data examines the internal control systems and fraud risk mitigation in Hibret Bank. Relying on feedback from key bank personnel, the article ascertains the overarching themes related to the nature of fraud encountered the role and limits of internal control systems, and organizational impediments to the successful implementation of anti-fraud controls. Results indicate a sophisticated pattern of fraud risk and identify the necessity for effective internal controls, active management of risks, and repeated staff training. Data were collected through semi-structured interviews with bank staff. Data were coded and themes were identified through a thematic analysis process. This generated rich insight into participant perspectives on internal control systems and fraud risk management.

As part of the qualitative element of this study, five key informant interviews were conducted with experienced banking professionals in order to achieve more profound understanding of internal control procedures and fraud risk reduction mechanisms at Hibret Bank. Interviewee One is the Head of District Operational and Financial Audit Section and has 15 years of work experience in the banking sector, of which 7 years at the National Bank of Ethiopia and 8 years at Hibret Bank. Interviewee Two is currently the Operational Risk Manager and possesses 17 years of extensive experience in the industry. Interviewee Three also holds the position of Head of the District Operational and Financial Audit Section and has 18 years of banking experience.

Interviewee Four is now Senior Risk Officer. She has 16 years of experience in banking. Interviewee Five is now Manager, Financial and Market Risk Management Division. He has 17 years of experience in banking. The diverse occupations and significant number of years of service of these respondents provided valuable views into the efficiency and issue problems of internal control systems in mitigating fraud threats.

Findings and Thematic analysis

Diverse nature of fraud incidents

The participants respond that it is a vulnerable kind of fraud which includes operational risks: is the most vulnerable kind of fraud which can involve both the internal staff and external customer. This includes fraudulent activities related with issuing loans without accurate collateral, counterfeit notes, depositing and manipulating customer account. Mobile Banking Fraud: characterized by synchronization of people's accounts.

Most of these scams appear to be committed by the same individual or group and exhibit similar patterns. Various fraudulent Activities: in banking industries both the internal and external parties involves in range of fraudulent tactics this includes stimulating signature of relatives in order to withdraw money ,and also making unauthorized withdrawal using forged documents and ATM. Internal fraud are committed by mismanaging undocumented accounts or theft by security personal.

Role and impact of internal control system

An internal control mechanism is an essential tool in preventing and reducing fraud. Strengthening internal control systems is recommended and the auditors are believed to significantly reduce both internal and external fraud occurrences. However, participants emphasized that the effectiveness of these controls heavily depends on employee attention and proper implementation. Carelessness and over-familiarity with routines were identified as factors diminishing control system.

Strengths and Weaknesses of Existing Controls

The interviewees acknowledged the strength of the bank's monitoring systems and proactive risk management, several weaknesses were noted. Weak areas are lacking training on repetitive tasks, exposing employees and branches to fraud risks, and lack of new employee training programs,

technical flaws in password controls, and lack of awareness about fraud detection processes. There were some concerns raised by a number of participants that very stringent controls could slow down customer service operations and lead to procedural bypassing.

Challenges in Implementing Internal Controls

Various challenges were identified while maintaining an effective internal control. The main issues were lack of cooperation from management bodies in internal control effort. Management decisions, such as prioritizing quantity over quality in opening accounts, can undermine effective internal control implementation. For example, the pressure to increase accounts during campaigns can lead to the neglect of appropriate KYC (Know Your Customer) processes. Operating units struggled with the implementation of training and lagged behind enforcement. There may be slowness in work, customer abuse, as well as stress on employees who are responsible for maintaining control. Communication breakdowns were the norm, with key instructions not being executed. In addition, sluggish legal processes discouraged the lodging of formal fraud cases.

Key Factors that Contribute to the accomplishment of fraud mitigation

Interviewers have mentioned some gains for the internal control system. Strong Audit and Risk Management: There must be a strong audit function to offer assurance for correct implementation of work procedures while having independence. Risk management is all about identifying fraud types and establishing additional controls in the event that others are insufficient. Good internal control is the work of management, audit, and the board. Effective organizational structure and right communication between branches and central control entities were also considered essential. Training and regular policy updating based on employee feedback was considered key to sustaining an effective control environment that remained responsive and resilient.

The study confirms that the success of fraud risk mitigation at Hibret Bank depends not only on the presence of internal controls but also on their proper application. The thematic findings show that employee training improvement, management buys in and control process enhancement are essential measures towards minimizing fraud. Periodic assessment and modification of internal controls that will be a crucial in reversing and evolving fraud threats.

Discussion (Triangulated Analysis)

Triangulation research in research refers to the use of over one method, data sources, researchers, or theoretical perspectives to cross check and validate conclusions. It increases the validity and credibility of research findings.

The triangulation of these investigations Eskindir Fikru's research with the theme on the impact of internal control system on fraud prevention and detection in Abay Bank study, and Dwi & Sonia's aims to analyze the impact of reporting systems and internal controls on fraud prevention on Indonesian state-owned enterprises (SOE) and my research investigate the assessment of the effectiveness of internal control system in reducing fraud in Hibret Bank the studies exhibits converging themes and complementary results regarding the use of internal controls on fraud prevention. All the three studies confirm the relevance of internal control systems in detecting and minimizing fraud risks. Eskindir and my study both utilize the COSO framework and its five main components: control environment, risk assessment, control activities, information and communication, and monitoring. The study corroborates that the factors have a statistical and positive significance impact on fraud minimization in Ethiopian banks.

Even though Eskindir's study is purely quantitative in nature, my study supports the analysis with qualitative interviews, having a clearer insight into issues in everyday life such as poor communication, ignorance, and non-utilization of fraud hotlines. Eskindir, for his part, cites collusion, management override, and human error as obstacles to internal control effectiveness. Both studies place staff continuous training and leadership commitment as topmost in fraud prevention.

The Indonesian research of Dwi & Sonia adds another valuable dimension by including the reporting system as the second independent variable alongside internal control. What their research indicates is that not only must internal controls are present, but also having an open and functional reporting system where whistleblowing and open communication are allowed will further increase an organization's fraud prevention capability. This aspect is not covered in the Ethiopian research but constitutes a vital omission that would render fraud mitigation more impactful if it was included.

In summary, triangulating these studies validates the position that internal controls, crucial as they are to fraud prevention, are not on their own effective. Their efficacy can be significantly complemented by auxiliary tools such as robust reporting channels and organizational frameworks that foster openness, vigilance, and accountability. Taken together, these studies suggest that an anti-fraud strategy must integrate formal controls with communication channels and cultural reinforcements.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

This section deals with summary, conclusion and recommendations. In this chapter first, the summary of the study was presented. Second, conclusions of the major findings are drawn. Lastly, some possible recommendations are forwarded on the basis of the major findings of the study and also suggestion for further study.

5.1. Summary of Major Finding

The study examined the effectiveness of internal control frameworks in mitigating fraud risk in Hibret Bank S.C. and found that all five components of the COSO internal control framework—Control Environment, Risk Assessment, Control Activities, Information and Communication, and Monitoring Activities that are equally significant in mitigating fraud. The components are combined to enhance the ability of the bank to notice, prevent and respond to fraud.

There was a strong negative correlation between the effectiveness of internal controls and fraud cases. This means that with the quality and strength of internal control elements on the rise, fraud cases in the bank decrease significantly, hence reflecting the need for sound controls in thwarting fraud. While total fraud occurrence was minimal, some types of fraud such as foreign exchange malpractices, embezzlement and theft, and impersonation were most commonly reported. These indicate areas of ongoing fraud exposure for which the general effectiveness of the internal control framework does not take credit.

Among the five components of internal controls, Monitoring Activities stood out as the weakest bond. The respondents also stated that there were insufficient follow-up systems and ongoing assessments either in existence or being inconsistently implemented, and a demand for tighter controls and performance monitoring systems within the bank.

Finally, managerial personnel largely recognized the presence and applicability of internal control procedures. However, they also showed enhancement of communication and monitoring procedures as a solution to mitigate further in strengthening the bank's security against fraud. Such evidence supports the necessity of constant refining and implementation of internal controls to remain within a low fraud risk environment.

5.2. Conclusion

The study concluded that the model developed in the study is significant and sufficient in evaluating the effectiveness of internal control systems in the mitigation of the occurrence of the common fraud risks in Hibret Bank. There is a strong positive correlation between internal control and fraud prevention and detection in the Bank, which implied that CE, RA, CA, IC and MA have capability of reducing fraudulent practices. From the above findings, a conclusion is made that both the control environment and risk assessment components showed the highest level of effectiveness in mitigating the occurrence of common types of fraud risks in Hibret Bank.

Including both qualitative and quantitative information in this study provides a homogenous image of how internal control systems minimize fraud risk at Hibret Bank S.C. Quantitative findings of this study based on a survey of 232 participants testified to the fact that all five COSO elements of internal controls (control environment, risk assessment, control activities, information and communication, and monitoring activities) are significantly and negatively correlated with fraud occurrence, showing that the higher the elements of internal controls are, the lower fraud risks are.

This is evidenced by the qualitative findings derived from key informant interviews with employees in the Internal Audit and Risk & Compliance departments. These informants highlighted the importance of a good ethical culture (control environment) and communicated policies as key components in avoiding fraud.

For instance, one of the interviewees mentioned that "employees act more responsibly when management frequently enforces ethical standards and acts as the role model," which supports the survey result of having a very strong mean score (3.68) for control environment.

Further, the two pieces of data emphasize the critical role of risk assessment. Quantitative results showed that risk assessment had the strongest negative correlation with fraud ($r = -0.730$). The same statistical association was also evident qualitatively: people identified the lack of regular reassessment as a problem and noted that risks are actually recognized in the first place, but internal and external changes are not always followed by amendments to the risk registry.

There was also a recognizable pattern in the control operations, such as authorization and separation of roles. This component had a quantitative correlation of -0.668 with fraud opportunities and an average of 3.65. Qualitatively, several respondents described how procedures failed. Duplicate duties or a lack of work rotation, for example, provided opportunities for manipulation, indicating that policies are in place but are not being implemented properly.

For communication and information, both data sources showed a weaker field to a lesser degree. Though the mean score was quite strong (3.51), interviews revealed fraud update delays and inconsistencies, particularly when conveyed to non-senior staff. Interviewees stressed the lack of feedback avenues for whistleblowers when the bank had anonymous reporting policies. This disparity reveals that operational communication mechanisms must be made as much as they need to exist.

Finally, monitoring activities was the weakest aspect from both quantitative and qualitative perspectives. Quantitative data reflected a neutral view (mean = 3.46), and the same was reflected by qualitative data. Staff mentioned that follow-up on internal audit findings is inconsistent and corrective actions are often deadline-less or without accountability. These findings suggest that without consistent and firm monitoring, other internal control programs may become ineffective in the long term.

The study finds that Hibret Bank's internal controls play a significant risk-minimizing role if effectively applied. However, communication ambiguities and unproductive monitoring limit their potential. Fighting such areas, led by qualitative understanding as well as quantitative evidence, is essential to attain higher total effectiveness against fraud.

The presence of clear objectives and communicating the objectives so as to provide effective direction to employees by the management from the control environment component and the presence of clearly defined authority, responsibility and accountability in the bank and the presence of policies on how to manage these risks from risk assessment component played major roles in mitigating the occurrence of the common fraud risks in the Bank . Therefore it can be concluded that all controls if not properly designed and implemented may create opportunity for fraudulent practices to take place.

5.3. Recommendation

Even if the Hibrates Bank S.C, Coso has a better internal control system based on the COSO framework, indicating that some areas require strong intervention to achieve the highest level of fraud. Thus, it is shown as follows:

Even if the Hibrates Bank S.C, Coso has a better internal control system based on the COSO framework, indicating that some areas require strong intervention to achieve the highest level of fraud. Thus, it is shown as follows:

- ❖ **Strengthen Monitoring Activities:** Implement more robust and consistent follow-up systems for internal audit findings and corrective actions. Establish clear deadlines and assign accountability for the implementation of these actions to ensure internal control programs remain effective in the long term.
- ❖ **Enhance Communication Channels:** Improve the timeliness and consistency of fraud updates, particularly for non-senior staff. Furthermore, create and actively promote clear and reliable feedback avenues for whistleblowers, ensuring that anonymous reporting policies are truly effective and trusted.
- ❖ **Address Control Activity Gaps:** Conduct a thorough review of control activities, especially in areas identified with weaknesses such as duplicate duties and lack of work rotation. Ensure that policies are not only in place but are also being strictly and consistently implemented to prevent opportunities for manipulation.
- ❖ **Regularly Reassess and Update Risk Registry:** Establish a more dynamic and frequent process for reassessing risks, particularly in response to internal and external changes. Ensure that the risk registry is consistently updated to reflect new and evolving fraud exposures.

Reinforce Ethical Culture and Management Role Modeling: While recognized as strong, continue to emphasize and consistently enforce ethical standards across all levels of the bank. Management should consistently act as role models in upholding these standards to further strengthen the control environment and encourage responsible employee behavior.

5.4. Suggestion for Further study

As part of this study, we evaluated the extent to which key internal control elements-control environment, risk assessment, control activities, information and communication and monitoring activities-help prevent fraud at Hibret Bank S.C. Even though findings provide useful information, more study is required in several areas. There are several suggestions for additional research listed below:

- ❖ **Extension to Other Financial Institutions:** This research targeted Hibret Bank outlets in Addis Ababa. Future studies can cover doing the same in different commercial banks in Ethiopia, including rural outlets, to gain more insights into the internal control environment in other operating environments.
- ❖ **Technological Innovations and Internal Controls-** As banks depend more on technology, in the near future, experts could investigate how tools such as fraud detection systems, block chain, and AI and real-time transaction monitoring could contribute to the success of internal controls.
- ❖ **Longitudinal Analysis of Fraud Trends:** By following fraud incidence over time in relation to changes in internal controls, a longitudinal survey can find out how effective such mechanisms are in the long run and uncover patterns not obvious from cross-sectional research.
- ❖ **Employee Ethics with the Organizational Culture:** Even though this research focused on the structure, there is scope for further research to consider whether strong corporate culture, positive employee attitudes and ethics within the company can help in preventing or reducing frauds.
- ❖ **Cyber security Risk:** Because fraud on the internet and through mobile devices is becoming a common banking issue, it would be useful to study the unique cyber security measures banks use and how they work together with their internal controls.

With these research directions, the contributions of this study can be extended by researchers and practitioners in an effort to develop additional fraud preventive measures and internal control effectiveness in the banking sector of Ethiopia.

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ANNEX

Questionnaire

QUESTIONNAIRE FOR SAMPLED EMPLOYEES OF HIBRET BANK S.C. HEAD OFFICE AND ADDIS ABABA CITY BRANCHES

TOPIC: The Evaluating the Effectiveness of Internal Control Systems in Mitigating Fraud Risks in the case of Hibret Bank S.C.

Dear Respondents,

The questionnaire below is designed to address the topic outlined above. Successful completion of this questionnaire will contribute to the fulfillment of the requirements for the award of a Master's Degree in Business Administration from St Mary's university. The researcher is committed to ensuring the anonymity and confidentiality of all individuals providing information in accordance with the ethical guidelines governing this study.

SECTION A: Bio-graphic Data of Respondents

1) Gender of respondent:

A. Male ☐ B. Female ☐

2) Age of respondent:

A. 25 years and below ☐ B. 26- 35 years ☐ C. 36-45 years ☐ D. 46-55 years ☐ E. 56 years and above ☐

3) Educational level of Respondent:

A. Diploma ☐ B. 1st Degree ☐ C. 2nd Degree ☐ D. Ph.D ☐ E. Any other please specify

4) Position held at Hibret Bank S.C.:

A. Manager ☐ B. Assistant Manager ☐ C. Division Head D. Section Head ☐ E. Director ☐ F. Chief ☐

5) How long have you been working at Hibret Bank S.C.? (Tenure of work)

A. 1-3 years [] B. 4-6 years [] C. 7-9 years [] D. 10 years and above []

SECTION B: Fraud Related Questions

6) In your experience in Hibret Bank, how is the frequency of causes related to fraud?

☐ Highly ☐ Moderate ☐ Low

7) Have you come across fraud cases?

☐ Yes ☐ No

8) What are your views on the types of fraud in Hibret Bank S.C.? (Put thick mark on the number closest to your view.

Use a scale of 1 to 5 where, 5= highly frequent, 4=frequent, 3=less frequent, 2=rarely frequent, and 1= not frequent

No.	Type of Fraud	Highly Frequent 5	Frequent	Less Frequent	Rarely Frequent	Not Frequent
1.	Theft andEmbezzlement					
2.	Defalcation					
3.	Unofficial Borrowing					
4.	Foreign Exchange Malpractices					
5.	Impersonation					
6.	Manipulation of Vouchers					

7.	Falsification of Status Report					
8.	Fake Payments					
9.	Forgeries					
10.	Computer Frauds					

9) By which parties is Fraud mostly committed in Hibret Bank?

Employees ☐ Customer Employees ☐ Integrated with customer ☐

10) In which position do you believe the fraudsters are mostly found? (Multiple response is possible)

Customer ☐ Service agents Management ☐
Cashier ☐ Supervisor/Accountant ☐

11) How is Fraud recognized in the Bank?

By accident ☐ Internal Audit ☐ By customer compliance ☐

12). What are the reasons to commit fraud? (Multiple response is possible)

Poor internal control ☐ Easy opportunities exist to commit fraud ☐
Lack of online auditing ☐ Lack of background check in recruitment process ☐
Poor ethics and moral ☐ System inefficiency ☐
Encouraged by other colleague ☐

SECTION B: Evaluating the effectiveness of internal control systems on mitigating fraud risk

13) What are your views on the effectiveness of internal control components on mitigating fraud risk?

Please rank the following statements ranging from strongly disagree to strongly agree where: 5= Strongly Agree; 4= Agree; 3=Neutral; 2= Disagree; and 1= Strongly Disagree

No.	I. Control Environment	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.	The bank has clear objectives.					
2.	The management communicates the objectives so as to provide effective					
	direction to employees.					
3.	There is significant compliance in operational and financial rules and regulations					
4.	The bank has a culture, code of conduct that rewards performance systems that support the business objectives.					
5.	The management demonstrates through its actions and policies the commitment to competence, integrity and trust.					

	II. Risk Assessment					
1.	The Board has clear strategies for dealing with the significant risks of frauds occurring					
2.	There are policies on how to manage these risks					
3.	Risks of frauds occurring are identified and assessed on an on-going basis					
4.	Authority, responsibility and accountability are clearly defined in the bank					
5.	The management have the knowledge, skills and tools to effectively manage risks to the achievement of their objective					
	III. Control activities					
1.	The bank communicate to its employees what is expected of them and the scope of their freedom to act					
2.	The management follow the bank rules, regulations, procedures in recruitment of employees					

3.	The employees in the bank have the knowledge, skills and tools to support the achievement of the bank objectives					
4.	There is proper segregations of duties					
5.	There is proper authorization and Approval of transactions					
	IV. Information and communication					
1.	The management receive timely, relevant and reliable reports on progress against the bank objectives					
2.	The management receive timely, relevant and reliable reports on indicators of change, such as employee attitudes etc					
3.	The information needs and related information systems are reassessed to meet objectives					
4.	The periodic reporting procedures are effective in communicating accounts of the bank position and prospects					
5.	There are established channels of communication for individuals to report suspected breaches of laws or regulations					

	V. Monitoring activities					
1.	There are on-going processes, which monitor the effective application of the policies, process					
2.	Such processes may include control self-assessment, confirmation by personnel of compliance with policies and codes of conduct.					
3.	There are effective follow-up procedures to ensure that appropriate action or changes against defaulters					
4.	There are appropriate communication to the Board on the effectiveness of the on-going monitoring processes					
5.	The monitoring personnel report any significant failure or weaknesses on a timely basis.					

SECTION D: Interview Questions for the study

1. In your experience, what are the most common types of frauds in your bank faces?

(በሚሰሩበት ባንክ ተደጋግመው የሚከሰቱት የማጭበርበር ተግባራት የትኞቹ ናቸው?)

2. How do you believe the internal control systems in place at your bank help mitigate these fraud risks?

(በባንኩ ውስጥ ያሉት የውስጥ ቁጥጥር ስርዓቶች እነዚህን የማጭበርበር አደጋዎች/ተግባራት ለመቀነስ ያስችላሉ ብለው ያምናሉ?)

3. What are the main strengths and weaknesses of the current internal control systems in place at your bank in relation to fraud risk mitigation?

(የማጭበርበር አደጋዎችን ከመቀነስ ጋር 68 በተያያዘ በባንኩ ውስጥ አሁን ያሉት የውስጥ ቁጥጥር ስርዓቶች ዋና ዋና ጥንካሬዎች እና ድክመቶች ምን ድን ናቸው?) .

4. What challenges or obstacles have you encountered in implementing or maintaining effective internal control systems within the bank?

(በባንኩ ውስጥ ውጤታማ የውስጥ ቁጥጥር ስርዓቶችን በመተግበር ወይም በማስቀጠል ምን ተግዳሮቶች ወይም መስፈርቶች አጋጥመውዎታል?)

5. What are the key factors that contribute to the success of internal control systems in preventing and detecting fraud within Hibret Bank?

(በህብረት ባንክ ውስጥ የሚፈጸሙ የማጭበርበር ተግባራትን በመከላከል እና በመለየት ለውስጥ ቁጥጥር ስርዓቶች ስኬት አስተዋጽኦ የሚያደርጉ ዋና ዋና ነገሮች ምን ድን ናቸው?)