



**ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF ACCOUNTING AND FINANCE**

**The Role of Forensic Accounting on Combating Fraud in
Ethiopian Banking Industry**

**A RESEARCH PAPER SUBMITTED TO THE DEPARTMENT OF ACCOUNTING AND
FINANCE OF ADDIS ABABA UNIVERSITY FOR THE AWARD OF DEGREE OF
MASTER OF SCIENCE IN ACCOUNTING AND FINANCE (MSc.)**

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2022

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STATEMENT OF DECLARATION

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ACKNOWLEDGEMENT

First of all, I would like to thank the Almighty God in every walk of my life. I would like to forward my sincere thanks to my family. My brother, Eyob H, has been with me since the beginning of this paper takes the biggest gratitude. The appreciation and thanks I have for my advisor TakeleFufa (PhD) is immense.

Abstract

This study assessed how forensic accounting helps in mitigating frauds in the Ethiopian Banking Industry. It aimed at identifying the types of frauds, causes and evaluating methods of forensic accounting applied and practiced. The study used a survey method as research design. Mixed type of research was applied by integrating qualitative and quantitative data to provide a complete image. The population of the study comprised 7 banks out of the 20 registered commercial banks which were established before 2000 G.C. Convenience sampling technique was used to select respondents from the population. Primary and secondary data sources are used to collect data from the respective departments. Sources of data comprised both interview and questionnaire. Primary data collected from respondents were analyzed using SPSS. Analysis and discussions comprise responses from the questionnaire and interview questions administered to the selected 7 banks along with the guideline by NBE. The findings of this study showed that forensic accounting methods and techniques applied by banks do contribute to detect, prevent and assist the investigative process of actual fraud cases. There are also factors causing to defect the role of forensic accounting techniques to be identified as weaknesses. Loose practice of internal control policies and procedures, inconsistent training and lack of practical deterring measures are some. Therefore, it is recommended that tight controls are practiced, consistent training is provided and strict punitive measures are applied to mitigate bank frauds.

Key words: Forensic Accounting, Fraud, Convenience, Consistent, Strict, Mitigate

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List of Acronyms

ACFE	Association of Certified Fraud Examiners
ANOVA	Analysis of Variance
ATM	Automated Teller Machine
CAR	Computer Assisted Review
CBE	Commercial Bank of Ethiopia
CIMA	Chartered Institute of Management
COSO	Committee of Sponsoring Organizations
CPO	Customer Payment Order
DBE	Development Bank of Ethiopia
GAAS	Generally Accepted Auditing Standards
GAO	Government Accountability Office
IFB	Interest Free Banking
NBE	National Bank of Ethiopia
NRA	National Risk Assessment
NSF	Not Sufficient Fund
OLS	Ordinary Least Square
POS	Point of Sale
SBB	Supervision of Banking Business
SPSS	Statistical Package for the Social Science
TAR	Technology Assisted Review

CHAPTER ONE

INTRODUCTION

This chapter comprises a brief overview of the research, problem statement, objectives, significance, scope and limitations of the study. The main ideas addressed as objectives are expected to be supported with theoretical and empirical literature review sections in the next chapter.

1.1 Background of the Study

In a world where there are various systems operating in a social setting, fraud is one of the threatening factors that causes severe impact. Fraud is characterized as an intentional material misrepresentation of information for the purpose of unlawful use of another party's possession. From the sectors facing this risk, financial institutions are prone to financial fraud. The practice of introducing forensic accounting has been taken as a response to curb the rising fraud related cases. In situations where there are suspects, experts in the accounting profession, fraud auditors perform a fraud auditing approach that involves collecting, identifying and bringing out evidential matters. Forensic accountants work on the evidential matters collected so as to investigate the financial information and provide reports to clients and begin litigation processes (Albrecht et al., 2009).

As defined by (Kranacher& Riley, 2020), fraud is a crime committed for monetary gain that employs deceit as a primary tactic. In order to identify that fraud exists there needs to have elements such as, unexpected accounting irregularities, manipulated gaps on the internal control, identified systematic irregularities where non-financial data does not align with financial data, noticed opulent lifestyles, observed strange actions, and inconsistencies expressed through reports.

Forensic accounting is concerned with an engagement on a certain fraud case found to be claimed misstated by forensic auditors. The auditors first identify frauds and forensic accountants examine the case based on evidence brought and determine the financial impact. Forensic accounting professionals assess both financial and non-financial evidence of fraud and evaluate the financial impact (Kranacher& Riley, 2020). Forensic accounting is analogous to

auditing. Auditors also dig into a collection of evidential matters in order to exercise the professional task which later serves as a reference to build on findings. The profession requires to possess the knowledge and capability of investigative skills in order to proceed legal issues to court and resolve the case (Crain et al., 2015).

The profession requires the skills of forensic accountants' ability to further explore from little information gathered from auditors, to be able to conduct extensive interviews, better understanding of the matter and reveal findings to concerned parties (Singleton & Singleton, 2010).

Under Fraud Monitoring Directives No. SBB/59/2014 (2014), Licensing and Supervision of Banking Business Fraud Monitoring of NBE has issued this directive. This is a requirement to be guided by fraud monitoring and control policies approved by the board of the banks and undertake needed measures so as to detect, prevent and take corrective actions on frauds. It also requires banks to implement organizational structures and mechanisms intended to disclose suspected fraud to the management and be communicated to the respective employees.

1.2 Statement of the Problem

The banking industry is the major interactive financial institution tasked with many services. The banking sector using information technology systems provides its services such as, ATM, POS, Mobile Banking, Internet Banking and recently emerging in joining the E-commerce. Other services rendered by the banks are accepting deposits, payments, exchanges of foreign currencies and providing loans. In the process of meeting customers' needs and serving the business in general they are highly threatened with frauds which causes an operational damage and results in financial loss for the bank industry and diffidence on employees and customers.

Frauds are likely to be committed on account of weakness in the internal control, offenders disregarding the existing controls, insufficient administrative controls, incompetent employees, lack of fraud awareness, lack of objective audits and unstructured organizational duties and code of conduct policies (ACFE, 2018).

Recently in Nigeria, N15.5 billion was lost due to bank fraud committed online. This electronic banking fraud (e-fraud) was caused by the recent changes made after the cashless policy was executed. The policy change was implemented so as it reduces risks related to circulation of

physical cash and corruption. After investigations were held it was found that it was caused in cooperation with staff in close relation with the system and external party. Due to uneasy determinability of fraud cases, the earliest occurrence traced in 3 months was 19%, 6% in 6 months, 13% in 12 months and the highest rate 62% in a period of time more than a year. Additionally, significant cases were detected after customer complaints and at time of regaining activities (Kundu&Rao, 2014).

Fraud cases in Ethiopian banks have been threats and were also identified to be key sources of financial crimes (Cusack et al., 2020). In a study from July 2015 to June 2016 bank frauds recorded and reported to the central bank amounted to 17,661,540 birrs (\$796,282). Ethiopian banks are prone to both frauds committed by individuals and using the system employed. As technological advancements are growing in the industry to ease the manual work and reach out the corners of customers' needs, frauds are also committed on the other extreme. Both types of fraud commitments cause financial stresses to banks in Ethiopia. The NRA also recognized unauthorized money transfer as a major financial crime. According to the Ethiopian Financial Intelligence Center examination until 2018, 248 unauthorized money transfers were investigated and of which 29 incidents had been charged and penalized.

Kebede (2016), studied the effectiveness of forensic auditing in investigating, detecting, and preventing fraud in public entities. The study employed a purposive sampling technique. Results indicated that effective forensic auditing practices have a major impact on investigating and detecting fraud. This result also indicated that effectiveness of forensic auditing does not minimize or prevent frauds.

Ethiopian banks have yet experienced accepting NSF cheques, cash transfer to inactive accounts, CPO issuance without assuring enough funds from customers are the common frauds which are found to be caused due to collusion of internal staff using their job position within the bank and other outsider parties (Hamza, n.d.). Recently as per an article on Addis Fortune (Central Bank Blacklists Individuals for Alleged Forex Fraud, n.d.), forex fraud amounting 21 million to 3.2 billion birrs were identified to be committed of which the greater amounts were found reported at Wegagen Bank, Cooperative Bank of Oromia and Commercial Bank of Ethiopia (CBE).

The concern here is, if the professional practice helps in minimizing bank frauds and assists in bringing the perpetrators of fraud to court of law and use the knowledge of forensic accounting

and legal support. This study tries to assess the need for forensic accounting knowledge and use of professionals on how to reduce frauds in the Ethiopian banking industry in general and identifying the causes, types of frauds and forensic accounting techniques used in combating frauds specifically.

1.3 Research Questions

To assess the role of forensic accounting in combating frauds on Ethiopian commercial banks.

Based on the problem stated in the above, the researcher has formulated the following basic research questions.

1. Which types of frauds are committed on Ethiopian commercial banks?
2. What are the causes of frauds on Ethiopian commercial banks?
3. Which forensic accounting methods and techniques are practiced by Ethiopian commercial banks in combating frauds?
4. How does the malpractice of the concept of forensic accounting impact in combating frauds on Ethiopian commercial banks?

1.4 Research Objective

1.4.1 General Objective

The aim of the research is to assess the role of forensic accounting in combating fraud on Ethiopian commercial banks. It inquires on identifying the overall impact and use of professional skills and expertise to help in reducing the risk of fraud in banks.

1.4.2 Specific Objectives

The research has the following objectives:

- To identify the types of frauds committed on the Ethiopian commercial banks.
- To identify the causes of frauds on Ethiopian commercial banks.
- To evaluate the forensic accounting methods and techniques practiced by Ethiopian commercial banks in combating frauds.
- To evaluate the impact of malpractice in the concept of forensic accounting in combating frauds.

1.5 Significance of the Study

In the last few years, the Ethiopian commercial banks have endorsed various reforms in improving the banking system in general. In all reforms it adopted, it is indicated that assuring the quality and safety in the banking system is becoming a key issue to build trust with customers and ensure sustainable development of the country. In this regard, this research is presumed to bring relevant information on the study topic and recommends possible suggestions, which might be used by NBE and all the banks.

The study clearly depicts how forensic accounting takes part in investigation, prevention and detection works. It is important that the research findings help all banks facing risks to understand the causes and types of frauds. Different shareholders of banks and customers consider the use of these professionals in investigative, detective and preventive practices. It also guides the forensic accounting techniques and professionals on their role in reducing frauds. Finally, this study can serve as a guiding point for future researchers in this area.

1.6 Scope of the Study

The scope of the study encompasses selectively seven banks from the twenty commercial banks operating currently due to the complexity of addressing all and because of the mixed research approach applied with a nature of recombined content, expensiveness and requiring much time. In this regard, the researcher delimits the research to the head offices only where the researcher can easily access data in collective manner. This is done by studying the response of the Internal Audit and Risk and Compliance Management department unit of the seven banks and the governing body, NBE, where fraud and related issues are addressed and concerned.

1.7 Limitation of the Study

The limitations this study possessed is it did not include the Development Bank of Ethiopia (DBE). Secondary data is also not included due to the inaccessibility of confidential and critical data thus causing the inability to have a full effect assessment on the whole study. Documents to be reviewed such as a sample fraud cases analyzed, procedures and specific guidelines on how to treat suspected and actual cases could not be referred.

1.8 Organization of the Study

This study is concerned with the role of forensic accounting in combating frauds on Ethiopian commercial banks. This paper is organized in five chapters. The first chapter begins with an introductory section which highlights the background of the study and then a brief description made on the statement of the problem. Following the description of the problem statement, research questions, general and specific objectives, significance, scope and limitation of the study and organization of the study are followed along with it. The second chapter presents the review of related literature. In this section of the study, a detailed theoretical and empirical concept of the proposed study and research gap identified is stated. An overview of the concept of forensic accounting and brief definition of fraud in general, the types and reasons for fraud, fraud auditing and forensic accounting, roles of forensic accounting, fraud risk management process, the methods of forensic accounting, forensic accounting techniques and empirical review on related literature.

The third chapter discusses the research methodology applied in conducting this research. It includes which research design, approach and method is used. The research method describes the data source and types, data collection tools, population, sampling technique and sample, and method of data analysis.

In chapter four of this study, results of the data collected from respondents of the respective banks is put here. The researcher presents, discusses and analyzes the data and findings. Lastly, in the fifth chapter the summary of findings, conclusions and recommendations are given based on the analysis stated in the previous chapter. This study finally comprises the list of references used by the researcher, the tools used for collecting data which are questionnaire and interview questions are attached.

CHAPTER TWO

LITERATURE REVIEW

2.1 Review of Theoretical Literature

This chapter presents the theoretical foundation and empirical evidence on forensic accounting and its role in combating frauds. The theoretical aspect explains the concept of forensic accounting, definition and types of frauds, the motivation behind the perpetrators, fraud risk management process and the role of forensic accounting. The empirical study of related literature presents other researchers' work on issues pertaining to fraud, forensic auditing and forensic accounting.

2.1.1 Definition and Concept of Forensic Accounting

According to Kreuter (2017) forensic accounting is simply litigation assistance regarding accounting. In court cases, forensic accountants use their expertise to address questions about liability, typically with an economic effect, or when there is a complaint expressed by a business that is actually experiencing fraud. Expertise of forensic accounting are also important in helping the audit team with analysis of risks of fraud.

Crumbley et al. (2015) defined forensic accounting as an application of accounting knowledge for issues in the litigation process. It is an act where records in the past are traced back to examine frauds from financial transactions using investigative skills and use them for legal proceedings. This approach unveils hidden financial data which is important for investigation and litigation purposes.

In forensic accounting, digital forensics is a highly growing specialization where the current fraudulent acts such as data breaches often involve thorough search of bulky databases to identify fraud trends and reveal attempts to hide it. It is very crucial for a forensic accountant to realize the fraudster would be just as complicated as the investigator is. Forensic accountants therefore need to ask investigators revealing facts to show the presence of crime. They aim to gather ample proof of fraud to establish justifiable arguments for damage recovery. When questioning witnesses, forensic preparation will help professionals develop their interviewing skills. Body language, voice and inconsistent answers are all signs to look for. Interviewers who

are experienced in this field learn how to interpret a witness's statements and efficiently probe for valuable details. The use of forensic accounting methods in legal support services assists a specialist in answering questions using general accounting expertise, forensic accountants look further into specific details to consider various factors, including whether the injured party has or may have prevented losses in part or as a whole (Kreuter, 2017).

2.1.2 Definition of Fraud

According to Fraud Monitoring Directives No. SBB/59/2014 (2014), "Fraud means act or omission by shareholders, directors, employees, customers committed with the intention of gaining dishonest or unlawful advantage for the party committing fraud or for other parties".

2.1.3 Types and Reasons of Bank Frauds

As stated by Sanusi et al. (2015) the types of frauds that are common in the banking industry are falsification on financial statements, frauds caused in granting credit to customers, misappropriation of assets, cash larceny, e-fraud, credit card fraud and money laundering frauds. It is an activity involving inappropriate, unethical and deliberate use of a job position for the purpose of achieving a financial gain against the bank and its customers. Bank frauds can be committed by both internal staff including the administrative fraud and employee fraud, and external parties such as agents, customers and outsiders involved in direct assistance of the internal staff.

2.1.3.1 Types of Frauds

Risks related to fraud can either be internally or externally perpetrated, so frauds can be classified as internal frauds or external frauds as discussed on (CIMA, 2008) and (*Bank Frauds in India*, n.d.). Bank frauds are defined as use of unethical conducts by professionals within or outsiders in pursuit of financial gain from banks.

Internal Frauds/ Fraud by insiders are frauds which are committed or actors are from within banks such as employees and management. Such types of frauds include cash theft, cheque fraud, misuse of accounts, wire fraud, theft of confidential information, fraudulent loans, forged documents and theft of identity.

External Frauds/ Fraud by others are acts of fraud committed by persons outside the bank including individuals having direct or indirect relationship with the bank. This includes forgery and altered cheques/cash, stolen cheques, cheque kiting, credit card fraud, impersonation, identity theft and money laundering (CIMA, 2008).

2.1.3.2 Reasons for Fraud

Sujeewa et al. (2018) explained that Cressey Donald in 1953 hypothetically began with an idea that individuals who have already built-in trustworthiness are the major actors in criminal acts. They plan to solve their financial distress secretly by abusing their position. The study founded the theory of the Fraud Triangle. Fraud participants engage in fraudulent acts so as to reap financial or non-financial advantage over the other. Perpetrators commit fraud for three main reasons. Opportunity, Incentive or pressure and, Rationalization or attitude are the causes for perpetrators to get involved in fraudulent acts. It assists in analyzing, helping prevent and reduce the happening of frauds. It also helps to know who the actors are and the favorable conditions as to which they commit frauds.

Cressey (1953) defined perceived pressure/incentives as motives which initiate potential perpetrators to commit fraud to assume financial or non-financial gain. This could be arising from pressures of urgent financial need, addiction, tensions from work colleagues and even employees themselves convinced with rewards to commit frauds for financial gain. Conditions such as unethical conduct of an employee, not-enough salaries, greedy behavior and stress are categorized as non-financial reliefs.

Opportunity refers to conditions available to commit fraud. It is grounded by a poor internal control organization that paves a way for employees to work and engage in unethical acts. According to (Nyakarimi&Karwirwa, 2015) conducive environments for the perpetrator to commit fraud are direct means of taking custody or use of assets and information. Lack of sufficient follow-up both internally and externally are the major factors to rely on as an opportunity to commit crime. Cressey categorizes perceived opportunity into two sub elements, general information and technical skill. Technical skills are the capabilities required to commit fraud. These were also needed by employees to sustain or reign on the position at first. Holding on to the key positions are the major steps taken. Held positions also determine the type of fraud he/she will commit. General information is the understanding where the position held is

convenient for the breach of trust and act of crime. It arises from information from former or already engaged employees who committed fraud.

According to Cressey (1953), rationalization is a stage where needed justifications are defined before committing the fraud. It is also considered as a component behind the motives. It is a means where the crime actor reasons out ways to justify wrongdoing. Actions are rationalized. This element is hard to trace or identify and read the intentions of the perpetrator. Cressey explains reasons why perpetrators rationalize is that their act as authorized or allowable act, labeling the immoral act in general as unreliable in order not blame oneself and seeing themselves as justified, questioning the intent of deserving the situation.

2.1.4 Fraud Auditing and Forensic Accounting

Fraud Auditing: detailed review and examination of accounting records in an organization to dig into facts to be used for legal purposes. Fraud auditors are knowledgeable and professional accountants or auditors mainly tasked with detecting and keeping records of fraudulent acts in financial transactions. These auditors must understand fraud from both audit and legal view, environmental, cultural and perpetrator's view as a whole. They collect credentials and keep records of frauds for the help of tasks done by forensic accountants. Fraud auditing helps create a situation for auditors to detect, prevent and correct frauds. It is expected of fraud auditors to prevent frauds from happening taking under consideration of knowledge of financial accounting and auditing. Frauds such as misstating, changing and replicating financial documentations are categorized under accounting type frauds (Singleton & Singleton, 2010).

Forensic accounting is about uncovering financial fraud involving forensic accountants by identifying and assessing fraud plots in the process of investigation. These accountants engage with auditors, attorneys and fraud examiners so that noncompliance with the professional standards is kept apart to be resolved legally (Ozili, 2015). For the litigation purpose forensic accountants organize and document financial evidence that help investigation and suggest practices that are considered to solve fraud issues for the future. The financial evidence is also used to produce reports where legal cases are based on and presented in court of law (Izedonmi&Ibadin, 2012).

2.1.5 Roles of Forensic Accounting

The role of professionals of forensic accounting and the discipline itself is described by (Okoye & N, L., 2009). Forensic accountants are the professionals who perform analysis, interpretation and summary of financial records in order to present the report which helps reveal violations from a legal perspective. Forensic accountants work with a high level of professional skepticism in practicing their knowledge and skill used in accounting, auditing and investigation. In doing investigations whether financial crimes are committed or not, they look into the real situations by digging deeper into analyzing the factual evidence. These evidence are reviewed and recommendations are implied for a feasible set of actions. They also help in assisting a group of experts for an in-depth investigation, inspection of forensic documents and advising other professionals working in hand with the institutions (banks) such as engineers to find out truth in the process of their inspection and present unbiased reports. Professional skills and expertise of qualified forensic accountants in litigation support present issues from expert attestation concerning financial and economic matters in light with current and pending litigation. This litigation support assumes the estimation and calculations of economic losses incurred from the violation of contract. The losses quantified will be brought into the desk of the responsible parties where legal discourses are put into discussion and help in settling disputes before appearing in court. However, each process does not necessarily have to cease in the eyes of the court of law. During trials forensic accountants help in consulting lawyers in situations where there are cross-questioning sessions with opposing professionals. They also assist in reviewing opposing professional's reports on losses and later producing a report encompassing the strength and weakness of the stand taken.

2.1.6 Fraud Risk Management Process

Organizations strive to be successful employing effective actions of fraud risk management as a driving force for their growth. In building a promising and actionable prevention and risk management program, it is very basic to have a firm understanding of which and how conditions are convenient and why fraudulent acts are perpetrated. It also includes a well-developed assessment of risk of fraud and help in responding to the identified fraud. After a detailed process of investigation and assuring frauds are committed, responsibility of penalizing perpetrators should be enacted. In order to form an effective fraud risk management environment in an organization there needs to be key principles to be established first as per (Owens, n.d.).

Principle 1: A written policy of fraud risk management program should be an element in the organizational structure. It needs to constitute the agreed ideas of senior management and board of directors.

Principle 2: Periodic and timely risk assessment should be implemented so that fraud risk exposures be measured and actions should be made to combat the risk.

Principle 3: Practical preventive methods that are assumed to avoid possible fraud risk and where on ground actions are executed to combat the risk and its impact on the organization.

Principle 4: Methods of detection should be formulated so that to reveal fraudulent acts when preventive methods fail to deter fraud risks.

Principle 5: Monitoring techniques should be put in place to bring out feedback on suspected fraud and organized investigative mechanisms can be employed to further ensure possible fraudulent acts are handled on time.

Guides which should be implemented to determine fraud risk management policy are fraud risk governance, fraud risk assessment, fraud prevention and detection, and investigation and corrective actions.

2.1.6.1 Fraud Risk Governance

(Owens n.d.)describeshparties involved in an organization with plainly ethical and organizational governing standards that commands to impose punishments for people found to be perpetrating frauds and companies as well. This step is considered as a basis for monitoring of fraud risks. Inefficiency in governing organizations is a critical issue that impairs the program of fraud risk assessment. Board of directors need to adopt governance strategies and policies that are required to be executed to management level to promote ethical actions, procedures for workers, customers, suppliers and other parties. It needs to check and control the effective fraud risk management programs periodically. Top level management members should be assigned to systematizing and responsibly assist fraud risk management and reporting to the board. An organization with a full set of fraud risk management program should encompass functional roles and responsibilities, dedication to the program, awareness or knowledge of the fraud, techniques of attestation, disclosure of disputes, evaluation of risk of fraud, ensuring monitoring, protection

and reporting practices, methods of inquiry, appropriate intervention and preventive actions, credibility and confidence building, and periodic follow-up for adherence or breach of code of conduct

2.1.6.2 Fraud Risk Assessment

According to (Owens, n.d.), this step begins with understanding the level and intensity of fraud risk that typically threatens the organization. Well designed and systematized fraud risk assessment actions which basically fits in the characters and purpose of the organization should be implemented and reviewed on a regular basis. The assessment should comprise risk identification and recognition, risk probability, impact analysis and approach to the risk occurred. Risk identification and recognition involves collection and assimilation of information from third parties involved in issues concerning securities, governing agencies and other professionally guided institutions. Organizational sources assess fraud threats using interviews by creating and availing a conducive environment with employees from a diverse variety of stakeholders, appraisal of reports by informants and analysis techniques.

2.1.6.3 Fraud Prevention and Detection

According to the Chartered Institute of Management Accountants (CIMA, 2008), fraud prevention actions require strategies, techniques, instruction and coordination that deter crime incidents from taking place. Detection centers on actions and strategies that proactively notice if either fraud has actually transpired or is emerging to happen. Although preventive strategies do not necessarily guarantee that fraud is not perpetrated, they are the front safety measure in helping to reduce risk of fraud. In the process of detecting fraud organizations significantly rely on auditing approaches, technological options and data analysis. Data analytics helps in identifying effective risk factors, trends and detect deviations of large transactions. The use of analytical and other techniques to highlight abnormalities, as well as the development of reporting channels that allow for communication of suspected fraudulent conduct, should all be part of a fraud detection plan. Exception reporting, data mining, trend analysis, and continual risk assessment are all important components of a robust fraud detection system. Application of technological tools helps to identify doubtful transactions on records by checking their cutoff period. Effective fraud risk management is improved when both detective and preventive

activities are done in full conformity. Preventive measures serve as a function of detecting fraud. While detective measures offer proof for the actual caused fraud but not aimed at deterring the theft.

2.1.6.4 Investigation and Corrective Action

The guide as per (Owens, n.d.), taking in to account that internal control mechanism will not offer full affirmation and guarantee against fraudulent acts, organizations are expected to set a framework under which timely, professional, reliable examination, review and resolve on reports of matters found to be defiant from the system. They will also need to initiate inquiries, report findings, take disciplinary measures and assess the results of investigations. They may increase the chances of recovery from damage by minimizing risk to face court cases and reputational risk by the development and in advance planning of inquiries and disciplinary action procedures. Periodic and timely investigative actions assist in reducing fraud risks. Individuals or groups assigned in the investigation process need to report conclusions to the responsible parties of the organizations. The reports will guide the controlling party to take corrective actions found on issues related to internal control problems, violations of policies and strategies and breach of code of conduct. It may result in actions of contract termination of employees and even taking the crime case to court to face the legal process of punishment.

2.1.7 Methods of Forensic Accounting

Abou-Zeid et al. (2020) and Alharbi et al. (2011) explained the two main methods:

Proactive auditing is an approach to gather information, secure it, detect suspicious incidents, collect evidence, conduct investigation, and create a case against any suspicious activities. It often entails maintaining structured and accurate accounting records, as well as ensuring the consistency of the financial system process through operational efficiency, policies, and procedures that aid keeping work within upper management directives. First there is proactive collection, then identifying event triggering function, proactive preservation of records, systematic analysis using data mining techniques and lastly producing an integrated preliminary report. This component ensures quality of evidence and protects it forensically. The facts would be analyzed in a way that the defendant can be prosecuted and admitted to court of law.

Reactive Auditing is an approach that entails identifying fraudulent or suspicious activity in order to establish whether or not there has been any wrongdoing and, if so, who is responsible, as well as gathering enough evidence to support a complaint. It is a conventional/post-mortem method of inspecting a digital crime after it has occurred. This includes locating, recording, gathering, reviewing, and producing a comprehensive report. This component collects two forms of data: active and reactive evidence. Active evidence includes gathering any active proof that remains after the event like processes operating in memory. Reactive evidence includes gathering all of the unused dynamic proof like a hard drive image.

2.1.8 Forensic Accounting Techniques

According to CIMA (2008) forensic accounting methods are suggested to be among the effective techniques in identifying and deterring fraudulent practices and corruption. Techniques applied in fraud investigation processes are summarized as follows:

2.1.8.1 Identifying anomalies

The two main fraud fighting techniques for forensic accountants constitute; training and practice, as well as the requisite mentality. The techniques that help to identify anomalies are background or context reading, risk assessment, benchmarking, system analysis, ratio analysis, mathematical modeling and exception reporting (CIMA, 2008).

2.1.8.2 Computer Assisted Reviews (CAR) or Technology Assisted Review (TAR) and Document Reviews

According to Grossman & Cormack (2011), CAR/TAR is a practice that involves reviewing documents with the aid of computers and uniquely built technical search and review applications. It is a process where computer software is used as an invaluable tool to search for and locate relevant evidence.

2.1.8.3 Data Mining

GAO - U.S. Government Accountability Office (2018) defined this as a method of analyzing data and identifying trends or patterns so that the consumer can make informed decisions. Regression, association rule discovery, classification, and clustering are the four data mining techniques available. This helps to identify and trace hidden anomalies.

2.1.8.4 Data Matching

It is the process of identifying records that belong to the same entity through several data sets with no common identifiers or detecting duplicate records within a single database. Record linkage, object identification, and entity resolution are all terms used to describe this system. This uses data comparison to detect frauds (GAO - U.S. Government Accountability Office, 2018).

2.2 Empirical Review on Related Literature

The examination of forensic accounting as a fraud prevention and detection tool in the public sector is studied by (Okoye, E.I. & Gbegi, 2013). Both data sources have been used. Analysis of variance (ANOVA) was used to test hypotheses. The researcher found out the application of forensic accounting has a striking impact on minimizing occurrence of fraud cases. It also identified on the results that there was a difference between professional forensic accountants and traditional external auditors. These implied forensic accountants are better on the prevention and detection processes. Thus, replacing external auditors with forensic accountants, proper training sessions and constancy to accounting and auditing standards were suggested to be applied.

Research by (Kebede, 2016) on the effectiveness of forensic auditing in investigating, detecting and preventing fraud in public entities was studied. The researcher applied a survey method and used purposive sampling to select samples from the population. Data was collected using review of related documents and survey questionnaires from both primary and secondary data sources. To test, analyze and interpret hypotheses; descriptive statistics, simple linear regression, Pearson's product-moment correlation, F-test and T-tests were used. SPSS software package was used to analyze survey data. Findings revealed that the relationship between investigation and detection were impacted by the effectiveness of forensic auditing.

Enofe et al. (2015) a study on the role of forensic accounting in curbing financial crimes. The study used survey research design. The population of the study includes respective employees from selected banks and departmental functions. Primary data was collected from a structured questionnaire which was administered to test the hypotheses. Data gathered were analyzed using

regression analysis. The study found out that the conventional accounting techniques were not effective in curbing financial crimes. Finally, the researcher indicated from the results obtained there was a need for actual implementation of the skill and use of forensic accountant professionals in the Nigerian Banking Industry.

Ocansey (2017) studied investigative accounting techniques and their importance in fighting financial crime in Ghana. The study used a survey method as a research design. Data gathered from respondents were analyzed by a regression model. The report's findings show that in Ghana, the application of investigative accounting techniques to combat economic and financial crimes has a significant positive relationship.

As stated by Eko et al. (2020) a study assessed the influence of forensic accounting techniques on fraud detection/prevention in Nigerian commercial banks. The Ordinary Least Square (OLS) model and descriptive statistics were used. Findings disclosed the use of commercial data mining, ratio analysis, and trend analysis techniques considerably improved the detection and prevention of fraud in the banking system. The survey also demonstrated the effectiveness of commercial data mining software in forensic accounting, as well as the lack of capability and understanding of most bank employees about data mining technology and the use of trend analysis techniques in identifying and preventing fraud. Based on the findings the researcher recommended that commercial banks should use advanced data mining software along with extensive training on the application of the software in the banking industry.

Onodi et al. (2015) studied the impact of forensic investigation methods on fraud deterrence for Nigerian banking companies, they revealed an important link between forensic investigation techniques (investigative accounting techniques) and fraud deterrence. The study also shows that prosecuting fraud generally requires the expert services of forensic investigators, but most auditors and accountants have little awareness and knowledge of forensic investigation methods.

2.3 Conclusions on Research Gap of the Study

The empirical studies by various researchers stated above showed the use of forensic accounting and auditing knowledge on prevention, detection and investigating financial frauds. These

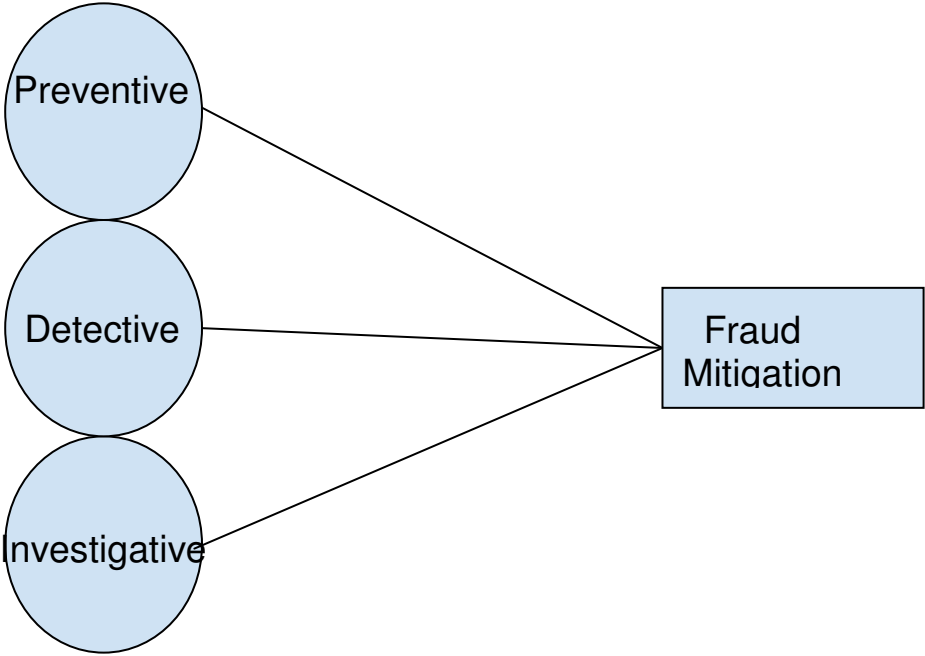
studies were conducted in Nigeria and Ghana. Yet there was a study on the use of forensic auditing in investigating, detecting and preventing frauds in public entities here in Ethiopia. However, this study differs from the above researchers in that it focuses on Ethiopian commercial banks by identifying the common fraud types, their causes and methods and techniques the banks employed to detect, prevent or deter and investigate frauds. It also comprises issues faced on the malpractice of the forensic accounting techniques and its impacts.

Apart from the above study from Ethiopia, this shows the alliance of the risk and compliance management department's preemptive measure to deter and the preventive, detective and investigative actions used by the internal control department of the banks. Therefore, this study regards the ideas stated to fill the gap the other researchers did not observe and cover.

2.4 Conceptual Framework

Figure 1: Conceptual Framework

Roles of Forensic Accounting Methods and Techniques



CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

Chapter one and two discussed the introduction of the topic and review of related literature with identification of the gap from previous researchers. This chapter discusses the type of research approach, research design, and research method applied in this study.

3.1 Research Approach

Mixed method of research approach is employed to assess the significance of the professional skills of forensic accounting in curbing financial frauds. It entails gathering both types of data (qualitative and quantitative data), evaluating and analyzing information using complementary concepts for both types of data. Creswell (2014) described the use for the researcher assumes that gathering a variety of data kinds, rather than only quantitative or qualitative data, will provide a more thorough knowledge of a research subject. The study starts with a large survey in order to generalize the results to a larger population, and then it moves on. focuses on qualitative, open-ended interviews in the second phase to acquire comprehensive viewpoints from participants to assist explain the original quantitative survey.

3.2 Research Design

According to Sahin& Mete (2021) descriptive research puts more emphasis on the how, what, when, and where a study challenge rather than why. It describes features of the population or the subject under investigation. The researcher adopts descriptive research design. This method is appropriate as the research deals with more focused aspects of forensic accounting and fraud. This design aids the researcher to know much-detailed information on each of the objectives listed from the data collected from respondents. It describes, explains, and helps to understand in-depth the causes, types of bank frauds committed, and the techniques applied by forensic accountants in assisting to mitigate frauds. By studying these elements, the impact of the techniques is assessed as to how they play a role in combating the bank frauds that are seen whether as potential threats or real cases that has already happened. In addition, this research design assists mainly in describing the actual work done by internal auditors (working as forensic

accountants in our case)in accordance with the theoretical perspectives put by scholars in the professional world.

3.3 Research Method

Kothari (2004) defines research methods as divides research methods into two categories: data gathering methods and data analysis methods. These approaches will be employed when the data presently provided is insufficient to arrive at the desired solution; they also include statistical techniques for establishing links between data and unknowns, as well as methods for assessing the accuracy of the conclusions produced.

3.3.1 Data Source

The data sources used for this research is both from primary and secondary sources. The primary data is collected from the Internal Audit and Risk and Compliance Management departments of the 7 selected banks working at each bank's head office. Primary data was collected through in - person interviews and questionnaires. The secondary data used was the NBE directive that sets out requirements on how attempts and fraud cases are reported.

3.3.2 Data Collection Tools

The researcher uses appropriate data collection methods in order to get the relevant data from primary sources. Hence, the study used semi-structured questionnaires and interview questions to collect data from primary data sources. Questionnaires are used to collect and record information from the Internal Audit and Risk and Compliance Management departments of the 7 banks. Nominal scale of measurement was used in setting up questionnaires. This is distributed to 120 employees from the selected 7 banks of the Internal Audit and Risk and Compliance Management department which includes a director, administrator assistant, inspectors, senior managers, IFB specialists, senior auditors and auditors both at medium and lower levels. Interview questions are administered for 7 directors. In addition to this, NBE's directive was referred to in this research so as to have a full image from the guideline of the highest supervising body as well.

3.3.3 Population, Sampling Technique and Sample

Currently there are 20 commercial banks operating under the governance of NBE. But, for the main study 7 banks are selected based on their year of establishment. The 7 banks selected for this study are, Commercial Bank of Ethiopia (CBE), Awash Bank, Dashen Bank, Bank of Abyssinia, Wegagen Bank, Hibret Bank, and NIB International Bank. They were founded in 1963, 1994, 1995, 1996, 1997, 1998 and 1999 respectively. These are selected to help the researcher condense the use of bulk information out of the data available. It also helps to minimize cost and save reasonable time. Since the Internal Audit and Risk and Compliance Management department deals with issues on potential risks and actual threats, policies and procedures, communication and monitoring control systems, questionnaires are administered to the employees of the selected banks. Interview questions are administered to the 7 directors of the Internal Audit department staff.

The sampling technique used for this study is a non-probability sampling technique which is convenience sampling. This technique is used to address employees that are homogeneous on the assigned occupation at the head office of each bank. For this reason, 120 questionnaires are distributed and 105 of them collected.

Table 3.1: List of Selected Tables

S/No.	Name of banks	Year of establishment (GC)	Number of questionnaires distributed	Number of questionnaires responded
1	Commercial Bank of Ethiopia	1963	20	20
2	Awash Bank	1994	15	13
3	Dashen Bank	1995	25	20

4	Bank of Abyssinia	1996	11	11
5	Wegagen Bank	1997	10	7
6	Hibret Bank	1998	12	12
7	NIB International Bank	1999	27	22
	Total		120	105

Source: NBE website and data from banks

The above table shows the list of the selected banks based on their year of establishment and number of questionnaires distributed and responded.

3.3.4 Data Analysis

For the analysis and presentation of the data collected from questionnaires are presented and interpreted using SPSS software resting up on reasoning. SPSS is selected for analysis because it is important for both quantitative and qualitative data types. It presents reports on frequencies, charts and percentage compositions. The data presentation includes explaining and discussing in detail the data gathered in light with the theoretical aspects and responses of interview questions along with the NBE directive.

3.3.5 Validity of The Test

Validity is one of the most essential aspects in determining the correctness of research tools (especially questionnaire). A validity test indicates that the measurement is being measured to the degree that it is being measured. Validity testing has two major components: internal validity and external validity, which are used to accurately measure study samples. Internal validity relates to how precisely the measurements produced from research were truly quantifying what was supposed to measure, whereas external validity refers to how closely the measure gained from the study sample described the reference population (Bolarinwa, 2015).

Validity tests for the measuring instruments which are considered, questionnaire and interview questions were acknowledged that it comprises the issue discussed in general. The measures are used as to how the research methods are applied and evaluated as relevant to the topic addressed, free from bias, reliable and supported with available information on hand.

3.3.6 Reliability test

The Cronbach's Alpha test which shows the consistency of respondents' response shows a result of 0.688.

Table 3.2: Reliability Test

Reliability Statistics	
Cronbach's Alpha =	.688
N of Items =	36

3.4 Ethical Considerations

In conducting research studies, researchers need to consider principles in collecting data from respective individuals. One of the main ethical ways is informed consent. This is a principle in which individuals considered to respond for a research study must be aware of the research purpose, how the data is used and is not forceful to make use of their resources. This implies a voluntary engagement with the researcher. Researchers also must assure respondents of the confidentiality of their identity and the organization's data as well. This includes presenting the collected data and even drafting questions keeping the anonymity of participants. And should be free of any risk of harm (Fleming & Zegwaard, 2018).

Taking into account this, the researcher in this study complied with the ethical considerations stated above. The data collected from each respondent is kept confidential, used with the respondents' consent and assures it does not bring any harm to any of the respondents.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

This chapter discusses the outputs of the data collected from respondents. For the data to be presented here and analyzed using SPSS version 26.0. 120 questionnaires were distributed and 7 directors were interviewed from the selected 7 banks of commercial banks of Ethiopia. This study mainly focused on addressing the head offices of the listed banks above in the previous chapter. It presents the results obtained from the 105 questionnaires responded back and data from the interviewed directors of the Internal Audit department. Findings are discussed along with the specific objectives set at the beginning of this study by describing in detail how the role of forensic accounting plays a part in curbing bank frauds in Ethiopian commercial banks.

4.1 Background and General Information of Respondents

4.1.1 Gender of Respondents

This section shows the gender proportions of respondents. Out of the responded questionnaires of 105 employees, 78 of them were male and the remaining 27 were identified to be female. As shown on the table below (Table 4.1) the significant number of respondents, 74.3%, were recorded as male and 25.7% as female.

Table 4.1: Gender of Respondents

		Gender			
		Frequenc y	Percent	Valid Percent	Cumulative Percent
Valid	Male	78	74.3	74.3	74.3
	Female	27	25.7	25.7	100.0
	Total	105	100.0	100.0	

Source: Study Survey, 2021

4.1.2 Educational Status

Based on the data collected from respondents' results showed the majority of the employees have either Degree or Master's degree. As it is shown on Table 4.2, 59% of respondents hold

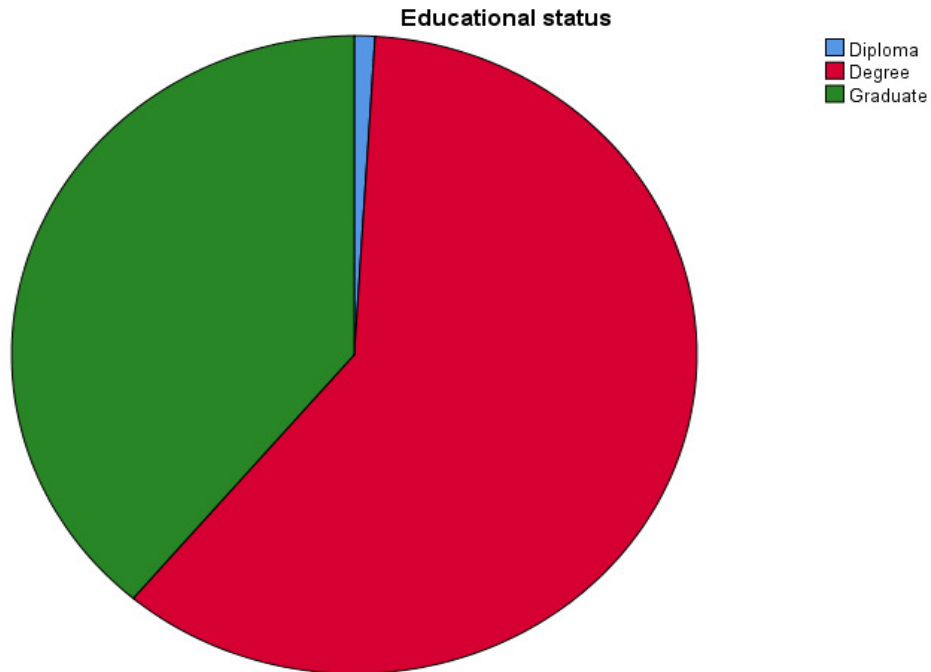
Bachelor's Degrees and 38.1% of them have Master's Degrees. Only a percent of 103 respondents hold a Diploma. This data indicates that almost all employees of the selected banks are educated and expected to understand the remaining questions well. Their educational background can also be indicative as adding value to the banks in possessing professional knowledge in the area of concern and being able to contribute in combating bank frauds.

Table 4.2: Educational Status

		Educational Status			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	1	1.0	1.0	1.0
	Degree	62	59.0	60.2	61.2
	Graduate	40	38.1	38.8	100.0
	Total	103	98.1	100.0	
Missing	System	2	1.9		
Total		105	100.0		

Source: Study Survey, 2021

Figure 2: Educational Status



4.1.3 Work Experience

The table below shows the percentage combination of respondents' work experience. 43.8% of the employees have work experience more than 10 years. 38.1% of them have shown the have 6-10 years' experience. 13.3% of them have 3-5 years' experience and the rest 3.8% constitute below 3 years of experience. This shows that most of the employees accounting more than 80% are well experienced, expected to know the culture and work behavior of banks. Thus, it helps in addressing any issues with professional knowledge and minimizes the gap of misunderstanding on basic matters related to frauds. The more experienced the employees are, the more they are vulnerable to different cases. Experiencing various fraud cases aids the professional in identifying and investigating the fraudulent act easier, adds valuable improvements on future remedies and contributes for further amendments/reviews in drafting new policies and procedures.

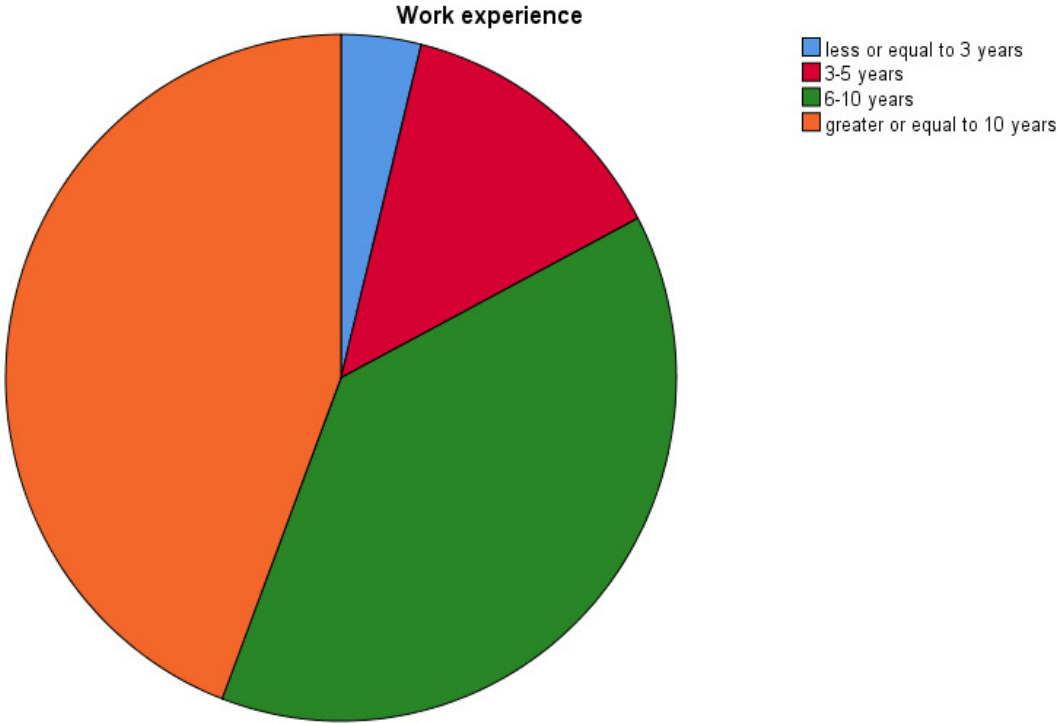
Table 4.3: Work Experience

		Work Experience			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	≤ 3	4	3.8	3.8	3.8

	years				
	3-5 years	14	13.3	13.5	17.3
	6-10 years	40	38.1	38.5	55.8
	≥ 10	46	43.8	44.2	100.0
	years				
	Total	104	99.0	100.0	
Missing	System	1	1.0		
Total		105	100.0		

Source: Study Survey, 2021

Figure 3: work Experience



4.2 Types of Frauds

This section discusses issues such as the general banking frauds reported at the banks, the actors who are benefiting from this criminal act and their motives behind the action of committing

fraud. Knowing this helps the forensic accounting professional to specifically investigate suspicious fraudulent activities based on the factual evidential matter, identify the commonly reported fraud types and assess the associated economic losses. Evaluating the quantified loss and identifying the actors participated is considered as well.

4.2.1 Bank Fraud Types

The table attached below shows the frequencies of occurrences of bank frauds. Respondents have had the right to select more than a single choice so that an individual can select multiple responses at once. Accordingly, the most reported fraud case types were cash theft (21.5%), cheque fraud (20.4%), forged document (18.6%), online banking fraud (11%), misuse of accounts (10.2%), identity fraud (9.9%), fraudulent loan (6.5%), money laundering (1.6%) and impersonation (0.3%).

The percent column shows the response rates of each case selected out of all the multiple response sets. That is why the total (N = 382) is bigger than the actual responded number of cases (N = 103).

This percent of cases tells us the frequency of options selected out of the 103 total number of individuals responded.

Table 4.4: Types of Bank Fraud

Case Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Bank Frauds^a	103	98.1%	2	1.9%	105	100.0%
a. Dichotomy group tabulated at value 1.						

Bank Frauds Frequencies				
		Responses		Percent of Cases
		N	Percent	
Type of Bank Frauds^a	Online Banking Fraud	42	11.0%	40.8%
	Cheque Fraud	78	20.4%	75.7%
	Identity Fraud	38	9.9%	36.9%
	Forged Document	71	18.6%	68.9%

	Impersonation	1	0.3%	1.0%
	Cash Theft	82	21.5%	79.6%
	Money Laundering	6	1.6%	5.8%
	Misuse of Accounts	39	10.2%	37.9%
	Fraudulent Loans	25	6.5%	24.3%
Total		382	100.0%	370.9%
a. Dichotomy group tabulated at value 1.				

Source: Study Survey, 2021

As shown in the above Table 4.4, survey results collected from respondents have mainly selected the bank fraud types as cash theft, cheque fraud, forged document, online banking fraud, misuse of accounts, identity fraud and fraudulent loans. Frauds such as employee fraud, forged stamps, impersonation of signatures, accessing inactive accounts without the owner's knowledge and ATM fraud are also reported commonly. This shows that both internal and external frauds are committed on Ethiopian commercial banks. However, any type of fraud whether potential threat or actual fraud cases are investigated by internal auditors of the banks. This tells us that the task of professional forensic accountants is performed by internal auditors. As per (The Institute of Internal Auditors, 2019) though the task of investigating these fraud cases is not the internal auditor's job, the skills required and competencies needed to perform the investigation should first be assured before the actual work begins. Regarding the condition after the fraud has already happened the case will be first handled by internal auditors for investigation. Internal auditors take the case in concern to detect the type of the actual fraud which could either be noticed on the spot or after a long time. They pin on where the loophole has been created and/or identify failure on implementation of the internal control guideline. Following this the auditors communicate the case with the audit team and further look to disclose actors participated.

Table 4.5: Perpetrators of Bank Frauds

Case Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Bad Actors^a	103	98.1%	2	1.9%	105	100.0%
a. Dichotomy group tabulated at value 1.						

Bad Actors Frequencies				
		Responses		Percent of Cases
		N	Percent	
Perpetrators of Bank Frauds^a	Employees	86	31.9%	83.5%
	Customer	94	34.8%	91.3%
	Third Parties	41	15.2%	39.8%
	Collusion	49	18.1%	47.6%
Total		270	100.0%	262.1%
a. Dichotomy group tabulated at value 1.				

Source: Study Survey, 2021

Table 4.5 shows the percentage composition of respondents' perspective on who the fraud perpetrators are. Customers accounting 34.8%, employees 31.9%, collusion 18.1% and third parties constituting 15.2%. As indicated in the figure most frauds are agreed by respondents that they are perpetrated either by customer or employees and even by colluding. The survey result shows customers take the major role in committing bank frauds. As shown on table 4.4 the most frequent fraud types happening are cash theft, cheque fraud and forged documents. Customers engage in these fraudulent actions by denying their money withdrawal from the account they access. This usually happens when the withdrawal is made without the book that customers need to provide at time of deposit and withdrawal. The updated amount of the money is written on the book and if not provided at time of withdrawal they deny their withdrawal. Employees are also found to be breaching the organization code of conduct and make use of their staff role to manipulate internal control policies. The staff individuals take part in cash theft solely. Cheque fraud and forged documents also involve employees either intentionally or unintentionally collaborating with customers. Based on the seriousness of the case it can be referred to the management to deal with the intent of committing such acts to handle the investigation on to another level.

Identifying the perpetrators helps the fraud examination process in resolving accusations from the get go to the point where the cases are handled to the police station and the legal case is

considered and brought to the court. If perpetrators are identified by the investigator or forensic accounting professional (in our case internal auditors) it assists the gathering of factual evidence, personal interviews and producing reports accordingly. In doing this the internal auditor works on quantifying the losses and damages occurred by having direct contact with the actor.

Cases identified on the spot creates exposure for the actors (employees/customers indicated as the most frequent actors) to be revealed at instance and makes the actor easily found to be in breach of ethical conducts for employees and hold on to accountability to the customer as well. Here, identifiability of the cases on the spot depends on the fraud types and the intent behind committing frauds. Situations like this can be taken as fraud deterrence methods, due to the notice-ability nature of the fraud, it threatens employees specially from such acts in fear of getting caught and failure to report any potential threat causing them questionable integrity in their place. Punitive measures would also be a deterring factor for employees singlehandedly trying to commit fraud or colluding with other parties. In fear of bearing the consequences following unlawful act employees may restrain themselves from participating.

Thus, it can be concluded as knowing the bad actors in the organization helps the professionals to focus their work on areas where manipulation or misconducts are seen. Hence, internal auditors working as forensic accounting professionals could also take consideration on focusing where additional measures can be taken into account. It also guides in revisiting policies to hinder chances of the internal actors perpetrating fraud and include changes on their reports used as memos on future developments.

Table 4.6: Motivation for Committing Bank Frauds

Case Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Motivation ^a	87	82.9%	18	17.1%	105	100.0%
a. Dichotomy group tabulated at value 1.						

Motivation Frequencies				
		Responses		Percent of Cases
		N	Percent	
Motivation for Committing Frauds^a	Lack of Direction	17	9.0%	19.5%
	Arrogance	39	20.7%	44.8%
	Complacency	25	13.3%	28.7%
	Lack of Transparency	39	20.7%	44.8%
	Complex Organizational Structure	10	5.3%	11.5%
	Poor Management/Accounting Control	58	30.9%	66.7%
Total		188	100.0%	216.1%
a. Dichotomy group tabulated at value 1.				

Source: Study Survey, 2021

As indicated by respondents on table 4.6, Poor management/accounting control constituting 30.9% is selected as the most inviting factor for committing bank frauds. Lack of transparency and arrogance also contribute 20.7% voices each as reasons perpetrators use as an advantage to commit frauds. Complacency 13.3% and lack of direction 9% are indicated as motives why fraudulent acts are committed as well. The least selected motive by respondents, complex organizational structure 5.3%, also plays a role in thoughts and actions of such criminal acts.

Professionals knowing the intentions of the actors for committing fraud provides a significant insight on how the ethical measures should be handled, policies need to be reviewed and improvements are made. As per the respondents' result it shows the loose management/accounting control constituting the bigger portion. This is an opportunity considered by the actor to make use of it for fraudulent acts. Internal controls are used to handle the possibility of fraud-if necessary, checks and balances are in place, it creates an environment where defrauding is difficult. Poor internal control measures on policies and procedures do contribute for perpetrators a playing ground to misbehave. Seeing this as a major threatening factor, internal auditors, handling the case as forensic accountants, need to develop tight internal control policies and emphasize on the actual execution of these policies on the ground. Using such drawbacks as developing issues to curb future uncertainties is considered as valuable inputs in combating bank frauds. Thus, it can be used as a weapon in showing the role of these

professionals in support of the positive development and reduction of potential or yet unrevealed fraud threats. In addition to this bank facing the biggest risk of fraud is due to the lack of integrity within the employees specially. This is a situation where the employee is not trustworthy to his/her deeds. Such misconducts are not controlled by strict policies set by the organization. Therefore, no external measure can certainly beat an individual's immoral act.

Arrogance also take part as the pushing factor to committing bank fraud. Such behavior does not concern the application of policies and procedures. And yet do not fear the consequences following the fraudulent act. Lack of transparency was one of the most frequent motives for committing fraud. This fraud motive is committed by employees using their most trusted positions as an advantage to benefit themselves or share financial gains with customers and third parties as well. This puts in danger the bank's policy execution and effectiveness in general.

Complacency, lack of direction and complex organizational structure were also the driving factors. In doing so, complacency reflects only the timely gain or satisfaction not the consequences following later. In addition to these, employees dissatisfied with their salaries and the loose chance of frequency of audit also are considered as intents by employees to commit frauds.

4.3 Causes of Fraud

Under this subsection issues related to internal policies and procedures of banks, training for employees and performance measurement. These elements are the major spots where roots to causes of fraud begin with. The inception of thoughts to commit fraud usually rely on policies and procedures put as organization's guideline to comply with the standards. There may be conditions where these policies and procedures create opportunity whether due to the ineffectiveness of implementation or the content itself. According to (Schandl& Foster, 2019) in developing policies and procedures as means to control the environment, fraud risk management activities need to be included.

4.3.1 Training for employees, Internal control policies, Performance monitoring and Job rotation

In the table shown below, Q (1), respondents have indicated that if their organization does provide training for its employees and the frequency of the action. Out of all 103 respondents, on

the training for employees that provides guidance on how to identify, address and report fraudulent acts, 74 (71.84%) of them witnessed that training is given and 29 (21.84%) disagree training is provided by their banks. Those who agreed the training is given in various situations. At times when new employees join the department and promotions are made for existing employees to join the internal auditors' team. Thus, the frequency at which training is given can be told as approximately annually. The survey result for this question shows a standard deviation of 0.44466 indicating that respondents have answers closer to each other and gives an impression where they have closely resembled in understanding of the question by the researcher.

In developing training sessions and guidelines for the banks, the first thing is identifying the fraud risks threatening or already impacting the activities. Training helps employees deal with preventive measures and detections in identifying suspicious activities. The directive set by NBE, under the Licensing and Supervision of Banking Business Fraud Monitoring, requires banks to provide anti-fraud training for all staff members. Anti-fraud training is given so as to detect and prevent frauds. It includes using privately secured passwords, effective training on the use and application of the system employed by banks.

In Q (2) of the 103 respondents, 101 (98.1%) of them have agreed that there are internal control policies in their banks and 2 (1.9%) do not agree. Of course, banks do have internal control policies and procedures that govern the activities. The standard deviation figure 0.13866 which shows the responses are coherent. It is not questionable about the existence but yet employees may not know the details and the use of these policies and procedures. As stated on the above Q (2), Anti-fraud policies are also adopted. These policies include preventive, detective and deterring techniques for frauds.

Q (3) talks about the internal control policies that are exclusively implemented by the internal control department. 54 (58.06%) of respondents have agreed on the availability of policies solely implemented and 39 (41.9%) indicated their disagreement. A standard deviation of 0.49613 tells the respondents to have similar witnesses on the presence of these policies in the department. Beyond the general control procedures drafted to govern the operational activities in the bank, there are policies drafted specifically to deal with issues on frauds. The governing body, NBE, requires banks to have control policies on monitoring frauds. Having these exclusively set guidelines helps to fight against any fraud attempts and/or actual fraud cases.

Q (4) shows the evaluation of performance of their staff on a regular basis. As per the survey results respondents revealed that 89 (85.6%) of them have witnessed monitoring of their performance is done regularly. 15 (14.4%) of respondents showing no evaluation is assessed. This performance management may help the management to use as a reference to promote employees to higher positions and amounts to salary increment. This demotivates employees not to engage in acts of crimes. A standard deviation of 0.35302 implies respondents having consistent response rate and understanding of the question addressed by the researcher.

Q (5) indicates the presence and application of job rotations in banks. 59 (58.4%) of respondents have shown that there is no job rotation in banks and 42 (41.6%) of them have agreed on the application of job rotation. The inapplicability of job rotation motivates employees to make use of their position in advantage of committing frauds and adapt to the crimes through time. Then they justify their wrongdoings as a legally right thing to do.

Table 4.7: Training for employees, Internal control policies, Performance monitoring and Job rotation

S.No	Statement		Yes	No	N	Mean	SD
1	Training for employees on how to identify, address, and report fraudulent act	F	74	29	103	1.2951	.44466
		%	71.84%	28.16%	100%		
2	Availability of internal control policies and procedures	F	101	2	103	1.0194	.13866
		%	98.1%	1.9%	100%.		
3	Internal control policies implemented by functions on Internal control department only	F	54	39	93	1.4194	.49613
		%	58.06%	41.9%	100%		
4	Monitoring	F	89	15	104	1.1442	.35302

	performance of staff regularly	%	85.6%	14.4%	100%		
5	Regular job rotation cycle	F	42	59	101	1.5842	.49532
		%	41.6%	58.4%	100%		

Source: Study Survey, 2021

4.3.2 Follow-up of training and Necessity of policies and procedures

The evaluation on the effectiveness of the consistency of training provided is put here. As it is indicated on Table 4.7 more than 70% of employees have shown the banks do give training. The issue here is to evaluate the training delivered by the banks to its employees by assessing the consistency and practical implication. The table attached below shows that 60 (60.6%) of employees show that there is ineffective consistency of the training and 39 (39.4%) have witnessed the effective training sessions are conducted consistently. The inconsistency of the training hinders the chances of employees from updating themselves on certain issues that are needed to be addressed to fight against the financial crime. This deters the possibilities of preventing, detecting the bank frauds before happening and even makes the aftermath difficult to assume or value both the financial and non-financial losses incurred. In addition to this, new additions to be considered as part of policies, which are usually put as memos within the employees will not be applied on future tasks of their routine work. This in turn affects the communication for the changes made not to be implemented accordingly.

Regarding the necessity of these policies and procedures in addressing risks of fraud, respondents have shown that 78 (75.7%) as these policies are effective enough in addressing risks of fraud. 25 (24.3%) of them were less effective. This indicates the policies and procedures developed and approved by the board of directors of the bank assist in acts of preventive measures. Risks of fraud are not actual occurrences rather threatening factors or anticipations that can be potential threats. These threats are mitigated by preventive measures taken by the banks. It could either be attempts which are not certainly identified as successful attempts or failed. However, NBE still requires these banks to report such attempts with respect to the reasons why the failure of fraud happened. The attempts and explanations are assured with the application of these policies and procedures and can be concluded as relevant in addressing the risks of fraud.

Fraud risk management program is set to create awareness about frauds, to evaluate risks and outline preventive methods by complying with the bank’s ethical standards. Risk assessment involves acts of risk identification process that potentially threatens the well-being of the operational activities of banks. Risk and compliance management department sets the program to reflect on the actions needed to be done.

Table 4.8: Follow-up of training and Necessity of policies and procedures

S.No	Statement		Less effective	Effective	Ineffective	N	Mean	SD
1	Follow up for consistency of training put in to practice	F	-	39	60	99	1.6061	.49111
		%		39.4%	60.6%	100%		
2	Necessity of policies and procedures in addressing risk of fraud	F	25	78	-	103	1.7573	.43082
		%	24.3%	75.7%	-	100%		

Source: Study Survey, 2021

4.3.3 Policy Review

The table below shows the percentage composition of respondents’ response on the frequency of policy review. As per 28 (26.7%) of respondents’ policy review is made annually, 12 (11.4%) responded it is reviewed semi-annually and 1 (1%) as there is quarterly policy review. The highest portion of respondents 51 (48.6%) agreed on policy review is made every 3-5 years. Even though there are considerations taken to review policies and procedures, it is not rewritten as when changes and additions are made every time. Rather changes in the middle of ongoing operational tasks are put as internal memos and communicated with the staff to comply with the updates and changes made.

Banks deal with ideas on review of these policies for various reasons and requests. In developing a new program design and implementation banks consider government policy changes and new issues, assessment of market, political environment, technological advancements, assessment of risks, comments from customers, cases encountered on happening of fraudulent acts, new issues on core banking system and at times when demands arise from NBE regulations.

Policy review helps banks address situations threatening the daily operation. Preventive, detective and mitigate measures are the key consideration in drafting these policies. In doing either regular audit or investigation on fraud we rely on these policies so that regular audits continue to serve operational tasks and investigative measures on potential threats or actual fraud cases and even further bringing up legal issues. Therefore, we can assume here that periodic policy review assists directly the forensic accounting work of internal auditors and contributes to an effective handling of fraud cases.

Table 4.9: Policy Review

		Frequencies policies are reviewed				Mean	SD
		Frequency	Percent	Valid Percent	Cumulative Percent		
Valid	Quarterly	1	1.0	1.1	1.1	3.4022	.75680
	Semi-annually	12	11.4	13.0	14.1		
	Annually	28	26.7	30.4	44.6		
	>1year	51	48.6	55.4	100.0		
	Total	92	87.6	100.0			
Missing	System	13	12.4				
Total		105	100.0				

Source: Study Survey, 2021

4.4 Methods and Techniques in Forensic Accounting

Under this specific objective the discussion lies up on the forensic accounting methods and techniques applied in combating bank frauds. The methods include collecting information, identifying anomalies, undergoing thorough investigations on doubtful incidents and handling the case legally if found to be an evidently fraudulent act. In addition to this identification of the fraud types is also addressed here. Active and reactive evidences are considered- evidential

proofs left over after the happening of the situation and unconsumed evidential matters to support the case.

4.4.1 Methods and Techniques in Forensic Accounting

One of the methods of forensic accounting is background checks on new employees. As shown on Q (1) of table 4.10 respondents have indicated that 51 (51.5%) of the employees agreed with the practice of checking background of employees. The background check is done randomly in order to check previous criminal history. This is done by employers prospecting to build a legitimate and reliable employee-employer engagement. Banks after analyzing entrance tests and considering potential new employees they request a forensic test from the federal police crime investigation office. While 48 (48.5%) of respondents indicated there is no background check of employees.

This serves banks as a credential where an individual holding a police clearance certificate is eligible to get employed, if other requirements are met. It is one of the preventive measures banks employ to tailor its fraud risk response. This requirement is part of the policy of the banks in recruiting new employees.

According to Q (2), 84 (84.8%) respondents have agreed that there is a periodic check and balance of their performance. 15 (15.2%) of them did not agree on the practice of employee's performance check. This performance check is one of the measures banks consider on promotions which banks consider as tying up trust issues with existing employees and advancements on new position assignments. It also uses this as a detective technique to identify progress and meet up with preset goals. Therefore, it can be considered as a major forensic accounting tool in curbing frauds before happening.

In Q (3) respondents have reflected their views on assessment of fraud trends. 82 (79.6%) of the employees responded that there is fraud trend assessment in banks. 21 (20.4%) there no fraud trend assessment is done. The trend assessment on fraud cases helps banks to identify the most commonly reported fraud cases, the causes and intentions behind cases previously reported. This serves the banks' management to use these trend reports as a reference point to work on new policy issues and amendments on existing ones. It also helps them in areas where special attention is needed and risky areas are spotted. This is included in the reports made by forensic accounting professionals to provide banks to deter frauds for future.

Table 4.10: Background check on employees, Periodic performance check and Trend of frauds

S. No	Statement	Yes		R an do m	Periodic			No	N	Me an	SD
		F			Q u a r t e r l y	Se mi- an nu all y	A n n u a l l y				
1	Background check on new employees	F	26	20	5			48	99	1.5152	.47517
		%	26.2%	20.2%	5.1%			48.5%	100%		
2	Periodic checks and balance of performance comparison	F	84	-	-			15	99	1.1525	.36037
		%	84.8%	-	-			15.2%	100%		
3	Assessment on trend of frauds	F	82	-	-			21	103	1.2039	.40485
		%	79.6%	-	-			20.4%	100%		

Source: Study Survey, 2021

The table below discusses the consistency of the financial system process and the reviews on the forensic accounting techniques drafted as policies and procedures. Respondents have reflected their responses on the frequency of checking the consistency of the financial system process. 47 (50.5%) have agreed on quarterly checks on consistency, 29 (31.2%) of them as annual checks and 17 (18.3%) semi-annually. This is an approach considered as a proactive auditing method used to detect unusual activities aligning with the guidelines. As it is shown on the respondents' responses banks do check this to identify or detect suspicious activities in their quarterly check. This is taken as a method used in forensic accounting and banks do well in doing this for their fight against financial frauds. The standard deviation value indicates the responses do not

disperse from the mean value. Meaning that the standard deviation of .88782 likely represents the data are close to the mean.

Regarding the reviews and updates on the techniques used in forensic accounting 32 (31.1%) of the respondents agreed it is made every 2-3 years. 20 (19.4%) of them witnessed reviews are made annually, 8 (7.8%) of respondents indicated reviews are made quarterly and semi-annually each. These reviews may be made as the bank’s policy and procedure updates on internal memos firstly, when needed and new decisions are made. Later the collections of these internal memos are written on the forensic accounting techniques included in policies. Therefore, it can be considered as the same way policies and procedures are reviewed; these techniques are reviewed and updated as well.

The updates on these techniques do consider data from fraud trends. Since the trend analysis shows which fraud types frequently occurred, what the causes were and fraudsters motive; it is easier to trace the appropriate techniques for already existing frauds and new techniques to update with. Therefore, it can be concluded here as updates on forensic accounting techniques are viewed in accordance with actual fraud cases already happening and suspicious activities. They are considered to be preventive measures for future risk responses and detective methods for already occurred fraud cases. Thus, it has a major role in curbing bank frauds.

Table 4.11: Frequency on consistency of financial system process and reviews on forensic accounting techniques drafted as policies and procedures

S. No	Statement	Yes		R a n d o m	Periodic				N o	N	Me an	SD
		F	-		Q u a r t e r l y	Se m i - a n n u a l l y	A n n u a l l y	O t h e r				
1	Frequency	F	-	-	47	17	29	-	-	93	1.8065	.88782

	on consistency of financial system process	%			50.5%	18.3%	31.2%	-		100%		
2	Reviews and updates on techniques drafted as procedures and policies	F	18	-	8	8	20	32	17	103	1.3709	.31549
		%	17.5%		7.8%	7.8%	19.4%	31.1%	16.5%	100%		

Source: Study Survey, 2021

Table 4.12 shows data from respondents on methods banks employ on fraud identification. As discussed earlier in checks of consistency in the financial system process, there are various methods of fraud identification. Here we are discussing the common types of fraud identification methods. Respondents ranked risk assessment as a major tool to identify frauds constituting 47.2%. System analysis accounting 22.5%, background/context reading 14.6% and performance comparison 9%. Based on respondents' responses, banks usually identify anomalies employing risk assessment techniques. This is a vulnerability assessment test implemented by banks either in investigative fraud auditing or regular audit. Investigative fraud auditing is an act of investigation requested from top management and goes through branches. Regular audit is a technique employed by the head office by taking samples from branches. There are also considerations on indicative factors such as customer's request that leads to assessing any risk of fraud or actual fraud case.

The second most frequent forensic accounting technique is system analysis. This technique aligns with the statement about the review and updates on techniques drafted as policies and procedures on table 4.11. After going through a thorough checks and audits to identify frauds, internal auditors do spot conditions which lay ground for perpetrators to commit frauds. These are the loopholes where fraudsters use as an opportunity in committing their act of crimes. This does not go as a one-time activity to leave by after identifying frauds, it is used and taken into consideration to make changes and updates on policies and procedures. The process of doing so helps internal auditors to reduce chances of using such opportunities to commit frauds. It is an

example of a system analysis where the policies executed are evaluated in a way assisting to detect frauds.

The third most frequently ranked technique is background/context reading. This is practiced by reviewing the fraud trends, issues on new fraud case happenings and problems. The fourth one identified by respondents as a common forensic accounting technique is performance comparison of the business process to its rivals. This is also called benchmarking its performance with the expectation of the industry. It helps to disclose any inconsistency by comparing performances from same period activities of its own in previous years.

Table 4.12: Methods on fraud identification

Case Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Identification of Frauds ^a	96	91.4%	9	8.6%	105	100.0%
a. Dichotomy group tabulated at value 1.						

Identification of Frauds Frequencies				
		Responses		Percent of Cases
		N	Percent	
Methods to identify frauds ^a	Background/Context Reading	26	14.6%	27.1%
	Risk Assessment	84	47.2%	87.5%
	Performance Comparison	16	9.0%	16.7%
	System Analysis	40	22.5%	41.7%
	Ratio Analysis	11	6.2%	11.5%
	Mathematical Modelling	1	0.6%	1.0%
Total		178	100.0%	185.4%
a. Dichotomy group tabulated at value 1.				

Source: Study Survey, 2021

Table 4.13 shows the forensic accounting techniques used by banks to prevent and detect frauds. As per the respondents' response random audits of company accounts comprising 18.5%. As stated above on table 4.12 banks do perform random audits by picking samples and selected branches are audited accordingly. Computer assisted review (CAR) is the second most ranked technique applied by banks. This technique is where the bank's system is used to review

documents and even trace back needed documents. This is an act of system-based audit where integrated documentation like evidence specifying who approved the transaction, time of transaction and date is found. It enhances efficiency and mainly helps to identify frauds on the spot. IT auditors take a major role here in keeping the system working effectively and set up the system to help inspectors detect fraud easily.

The third frequently used technique is IT controls which is likely the same as the system-based audit stated in the above paragraph. This includes working on the IT system to make it difficult for perpetrators to manipulate the database. It also provides its users a conducive environment, friendly interaction to the system and efficiency in terms of time saving.

Data mining technique is also used to detect fraud by assessing fraud trends where the data fed in the bank's system is analyzed by associating the patterns to discover the anomalies. As per respondents' response this technique is used to identify frauds and any suspicion arising from the customers or the bank itself.

The other equally ranked preventive techniques used by banks are separate functions on duties and limiting access to company proprietary information. These techniques are used to reduce chances where employees take advantage of their dual responsibility opportunities to make use of committing frauds. After experiencing such crimes, banks do take lessons and prevent them from being assigned the same task and even access to proprietary information.

Table 4.13: Forensic Accounting Techniques

Case Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Forensic Accounting Techniques ^a	102	97.1%	3	2.9%	105	100.0%
a. Dichotomy group tabulated at value 1.						

Forensic Accounting Techniques Frequencies			
	Responses		Percent of Cases
	N	Percent	

Forensic Accounting Techniques^a	Computer Assisted Review	54	17.5%	52.9%
	Separate Functions on Duties	37	12.0%	36.3%
	Rotation of Duties	2	0.6%	2.0%
	Random Audit	57	18.5%	55.9%
	Implementing Tight Internal Control	14	4.5%	13.7%
	Limiting Access to Proprietary Info	37	12.0%	36.3%
	Data Mining	39	12.7%	38.2%
	IT Controls	52	16.9%	51.0%
	Ratio Analysis	4	1.3%	3.9%
	Data Matching	12	3.9%	11.8%
Total	308	100.0%	302.0%	
a. Dichotomy group tabulated at value 1.				

Source: Study Survey, 2021

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

The previous chapter discussed the results from the outputs produced from SPSS. Under respective response sets results from interview questions were also included and briefly stated. This chapter puts the summaries, the conclusions and, recommendations will be specified relying upon gaps identified.

5.1 Summary of Findings

The common bank fraud types experienced were cash theft, cheque fraud, forged documents and online banking fraud. Knowing this helps banks in adopting suitable preventive measures in their policies and procedures. Methods in dealing with such fraud types will also be put to present factual data in gathering evidences to file legal cases against them. Perpetrators taking part in committing bank frauds mainly were customers and employees solely. But also, in collusion with other third parties and within customers and employees. Responses indicated the intentions behind these parties to commit frauds were mainly loose management control within banks, lack of transparency, arrogance and complacency.

Trainings are provided relating to on how to address, deal and report fraudulent acts. These trainings are given so as to clarify details on policies and procedures drafted as guidelines and, update newly issued policies to its staff members. Yet causes indicated by respondents for frequent fraud occurrences were impracticality of job rotations and inconsistency of training given by banks. This paves way for perpetrators to use their assigned position in advantage of manipulating for their own use. Inconsistency of training creates a knowledge gap among employees and with the management as well.

Policies and procedures used by the banks are reviewed periodically. There are also reasons considered why policies are reviewed. One of them needed issues to be addressed and included in arising from actual fraud cases or attempts that might be used as new additions. Outdated policy matters also get review and updates are considered accordingly. Necessity of policies and procedures in addressing risks of fraud are indicated as effective tools to prevent frauds. Banks

do consider new policy issues from NBE, technological changes, political issues and risky opportunities in developing new policies and procedures and updates required as well.

Performance monitoring of employees is also considered as a tool to assess employees' capacity in meeting organizational goals and creates positive relationships within the management or senior employees. This builds up trust with employees having an outstanding performance and helps them get promotions to higher level positions. It can be considered as an incentive to choose a righteous path instead of attempting growth through fraudulent acts.

Methods and techniques in preventing and detecting frauds were also used by banks. Methods such as checking background of new employees, consistency of financial system process of banks and identifying frauds using various methods. The techniques were used to detect frauds by conducting random audits, computer assisted reviews, IT controls and data mining techniques. Updates and reviews on these techniques and assessment of the fraud patterns are also used as detecting measures.

5.2 Conclusion

Relying up on the results found from respondents' responses to questionnaire and interview questions summarized above, the researcher drew the conclusions below.

Bank fraud types commonly identified as frequent cases helps, the internal auditors in our case, to spot on easily the perpetrators and ease the process of gathering evidential matters and review regarding any attempts made. This can be taken as a reference point where the employees of the internal audit and risk and compliance management do more of the deterring and preventive measures in minimizing the chances of the occurrence of the most frequent bank fraud types. However, the identification of these frauds is done and the perpetrators are identified banks do not find practical ways to deter employees' lack of integrity, arrogance and complacency witnessed in their responses as motives to commit fraud. Failing to do this costs the banks to continuously suffer from huge financial and non- financial losses. The non-financial losses can be described as reputation damage, distrust on the banks and incompetency among rivalry that leads to the slow pace growth or even worse shrinking of banks capability in undergoing daily

operational activities. Therefore it can be concluded as failure to deal with the common types of frauds contribute to increase on frauds in banks.

Trainings given on how to address deal and report fraudulent acts is one of the acts that help the investigating parties in facilitating the forensic accounting task. The trainings assist in analytical procedures used in preventing, detecting and investigating process. It helps them on how the policies and procedures set are executed, compare current fraud prevention and audit practices with other competing banks in developing nations bank. Networking opportunities with senior audit and compliance officials also provides them with greater range of shared experiences. But, the inconsistency of trainings contributes to lack of getting updates on new policies and procedures. It creates an environment where there is no fair and ethical organizational culture with in the bank. This hinders the major preventives measures put by banks to combat frauds. Weaknesses will not be addressed accordingly if there is inconsistent training practice. Therefore, this violates the anti-fraud policy structure and implementation which in turn contributes to increase of fraud cases.

Internal control policies drafted by banks are not found to be strict and practical. This causes the internal fraudsters to walk freely and not bounded by these policies as there are loose controls within the management. This makes perpetrators either internal or external to collude for financial crimes against the execution of policies. Thus, it is a loophole that paves ground for acts of frauds on the banks.

The main objective where the researcher wants to assess is the use of the forensic accounting methods in preventing frauds from happening and causing losses. It was identified as good qualities that banks employ forensic accounting techniques used to identify and investigate actual fraud cases also assist in bringing perpetrators to court of law and get punished. From the primary task of deterring and detecting measures to the investigation process banks apply both the manual and automated (digital forensics) methods. Techniques such as rotation of duties are not practiced and found to be one of the factors contributing to the rising of fraud cases. Ineffectiveness of job rotation within employees assists the employees to stick with current position to commit frauds and easy to get used to these acts by rationalizing both the attempts and acts. This method is one of the detecting methods which forces employees to take other positions in exchange. Employees engaged with frauds are more likely needing to continue

working on a specific position in order to hide their misconduct. But if banks operate with job rotation cycle chances of detecting the concealed criminal acts will be revealed and also be considered as demotivating factor for the fraudsters. Therefore, banks fail on applying job rotation for their staffs contribute to the increase of fraud cases. Yet have negating impact in combating bank frauds.

5.3 Recommendations

Based on the findings discussed above the researcher has put the following recommendations.

Banks need to lay a ground where the motivational factors do not make use of the opportunity and simplified reasoning are mitigated by strict punitive measures outlined and practiced by the banks. Since the motives that employees indicated as personal behavioral issues are not dealt according to banks policies and procedures, banks need to face them with measures directly impacting the fraudster such as salary cuts, dismissal and repayment of the actual loss incurred.

Banks need to adopt practical internal control policies and make sure the execution is really impacting the sound operational activities on the ground. This will help reduce the risks of fraud and help to measure the operational efficiency of the banks. They must comply with their control policies and ensure there is a tight internal control by the management so that opportunities are not availed for fraudsters to attempt any fraudulent act. Tight control in banks ensure a safe working environment for employees and due diligence.

Banks also need to practice job rotation so that chances of manipulating and taking advantage of positions assigned is minimized to commit frauds. It also enhances the position where an employee best fits and serves as backup spot at time of employee leaves. Broadening skills and experience also can be taken as positive initiative to fill gaps and address timely tasks. It also boosts the employees' interest and enthusiasm. Practically this can be exercised by regular or random shifts on positions assigned to relatable job positions.

Additionally, consistency of trainings need to be executed to ensure employees are well aware of changes and updates. This helps to attain company's preset goals. It builds employees confidence on related issues and reflects on the company's safety standards. And helps to possess sound,

safe and timely operations accordingly. Banks can implement this by setting up regular training sessions and assure the practice is done on ground so as to equip the organization's employees with current and changing situations accordingly. This helps ease and decrease the chances of occurrence of fraud due to outdated organizational and governmental changes.

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APPENDICES

Appendix I: Questionnaire

Addis Ababa University

College of Business and Economics

Department of Accounting and Finance

Questionnaire: The following questions listed below are designed to collect information about frauds in Ethiopian banks and role of forensic accounting in combating frauds. This information will be used as primary data source in this study. Your honest and prompt response will contribute to present a full image research for the partial fulfilment of my MSc in Accounting and Finance at Addis Ababa University. Your responses will be kept confidential.

Part I: Background of Respondents

1. Indicate your gender
- Male Female
2. Educational Status
- Diploma Graduate
- Degree
3. Experience
- ≤ 3 years 3 - years
- 6-10 years 10 years

Part II: Types of Frauds

4. Which types of banking frauds do occur in your organization? (you can select multiple choices)

Online banking fraud

Cheque fraud

Identity fraud	<input type="text"/>	Money laundering	<input type="text"/>
Forged document	<input type="text"/>	Misuse of accounts	<input type="text"/>
Impersonation	<input type="text"/>	Theft of identity	<input type="text"/>
Cash theft	<input type="text"/>	Fraudulent	<input type="text"/> loans

Others if any,

5. Who were the bad actors?

Employees	<input type="text"/>	3 rd parties	<input type="text"/>
Customer	<input type="text"/>	Collusion	<input type="text"/>

Others if any,

6. What motivates perpetrators to commit fraud?

Lack of direction	<input type="text"/>	Lack of transparency	<input type="text"/>
Arrogance	<input type="text"/>	Complex organizational structure	<input type="text"/>
Complacency	<input type="text"/>	Poor management/accounting controls	<input type="text"/>

Others if any,

Part III: Causes of Fraud

7. Is there a training for employees that provides guidance on how to identify address and report fraudulent act?

Yes No

If yes, how often

8. How do you evaluate the proper follow up for consistency of training put-in to practice

Effective Ineffective

9. Are there internal control policies & procedures?

Yes

10. How often are the policies reviewed?

Quarterly Semi-annually Annually

Others if any,

11. Are the internal control policies implemented by functions on internal control department only?

Yes

If no, which function/job position/departments are mainly addressed?

12. How do you measure the necessity of these policies & procedures in addressing risks of fraud?

Less effective Effective Ineffective

13. Is the performance of staff members regularly monitored?

Yes No

14. Does your organization have a regular job rotation cycle?

Yes No

15. What factors are considered in developing a new program design & implementation? (List as much as you can)

Part IV: Methods and Techniques in Forensic Accounting

16. Does your department conduct thorough background check on new employees?

Yes No

If yes, Random Periodic

17. How does your bank/organization identify frauds?

Background/context reading System analysis

Risk assessment Ratio analysis

Performance comparison Mathematical

Others if any,

18. Which forensic accounting techniques are applied to prevent and detect frauds?

Computer assisted review IT controls

Separate functions on duties Ratio analysis

Rotation of duties of employees Data matching

Random audits of company accounts

Using data mining to uncover anomalies

Implementing tight internal control accounting functions

Limiting access to company proprietary information

Assigning trusted outsider for review & reconciliation of accounts

Others if any,

19. How often do you check to ensure consistency of financial system process?

Quarterly Semi-annually Annually

Others if any,

20. How do you undertake vulnerability assessment and unique test to detect frauds?

21. Are there periodic checks and balance of performance comparison?

Yes No

If yes, which departmental function/s?

22. Are there reviews and updates on techniques drafted as procedures & policies?

Yes No

If yes, how often?

Quarterly Semi-annually Annually

Others if any,

24. Does your organization assess the trend of frauds?

Yes No

Thank you for your kind response!

Appendix II: Interview Questions

Addis Ababa University

College of Business and Economics

Department of Accounting and Finance

Interview: The following questions listed below are designed to collect information about frauds on commercial Ethiopian banks and role of forensic accounting in combating frauds. This information will be used as primary data source in this study. Your honest and prompt response will contribute to present a full image research for the partial fulfilment of my MSc in Accounting and Finance at Addis Ababa University. Your responses will be kept confidential.

Interview Questions

1. Which types of frauds are commonly reported?
2. What are the steps applied in analyzing fraud cases?
3. Is there any digital forensics method applied in detecting frauds?
4. How do you assess the use and impact of forensic accounting techniques in helping combat frauds in banks?
5. How does the trend assessment help in forensic accounting work?

Thank you for your kind response!