



St. Mary's **ታዲላ ማርያም**
University **የኢትዮጵያ**
Committed to Excellence

**ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES
FACULTY OF BUSINESS**

**DETERMINANT OF INTERNAL AUDIT
EFFECTIVENESS IN FRAUD PREVENTION:
A CASE STUDY ON SELECTED PUBLIC
ORGANIZATION**

BY:

MINDA YIHEYIS

ADVISOR:

MISRAKU MOLLA (PhD)

JUNE, 2024

ADDIS ABABA, ETHIOPIA

**DETERMINANT OF INTERNAL AUDIT EFFECTIVENESS IN FRAUD
PREVENTION:
A CASE STUDY ON SELECTED PUBLIC
ORGANIZATION**

By

MINDA YIHEYIS

(SGS/0126/2015A)

ADVISOR

MISRAKU MOLLA (PhD)

JUNE 2024

ADDIS ABABA, ETHIOPIA

**ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES
FACULTY OF BUSINESS**

**DETERMINANTS OF INTERNAL AUDIT EFFECTIVENESS
IN FRAUD PREVENTION:
A CASE STUDY ON SELECTED PUBLIC
ORGANIZATION**

BY:

MINDA YIHEYIS

APPROVED BY BOARD OF EXAMINERS

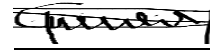
Dean, Graduate Studies

Signature

Advisor

Signature

Giday Gebrehiwot (Ph.D)
External Examiner



Signature

Siman Tereke (Asst. Professor)

Internal Examiner



Signature

ACKNOWLEDGEMENTS

I want to express my profound gratitude to God for guiding me through all the challenges I faced during this journey. My advisor, Misraku Molla, Ph.D., deserves special recognition and my sincerest thanks for helping make this study feasible. I was able to complete every step of writing my paper thanks to his unwavering direction and counsel. I also want to extend my gratitude to my examiners for their insightful remarks and valuable recommendations. Lastly, I would especially like to express my heartfelt appreciation to my family, boss, and friends for their steadfast support and patience as I conducted my research and wrote this thesis.

TABLE OF CONTENT

PAGE

Contents

Acknoledgmentes	iii
Table of Contents	iv
List of Tables	vii
List of Figures	viii
List of abrivation.....	ix
Abstract	xi
CHAPTER ONE.....	1
INTRODUCTION.....	1
1.1 Background of the Study	1
1.2 Statnentes of the problem.....	2
1.3 RESEARCH QUEITION.....	4
1.4. Research objectives	4
1.4.1. General Objective	4
1.4.2. Specific Objectives	4
1.5. Hypotheses of the study	5
1.6. Significance of the study	5
1.7. Scope of the study	5
1.8. Limitation of the study	6
1.9. Organization of the paper.....	6
2. LITERATURE REVIEW	7
2.2 Review of Conceptual Literature	8
2.3 Underpinning Theories.....	9
<u>2.4</u> Review of Empirical Literature.....	10

2.4.1. Determinants of Internal Audit Effectiveness.....	12
2.4.1.1. Competence of internal auditors.....	12
2.5 Summary and Knowledge Gap	14
2.5 Conceptual Framework	15
Figure 2.1 Conceptual Framework.....	16
2.6. Hypothesis Development	17
3. INTRODUCTION.....	19
3.1. Research Design.....	19
3.2. Research Approach	19
3.3. Data Sources and Types	20
3.4. Data Collection Techniques	21
3.5. Sample Design & Determination	21
Table: 3.1 Sample size and selection	22
3.6. Data Analysis Techniques.....	22
3.7. Model specification	23
3.8. Variable Definition & Measurement.....	24
3.8.1. Dependent variables.....	24
3.8.2. Independent Variable.....	24
3.9. Reliability and Validity Test	25
3.10. Ethical Clearance.....	26
4. DATA ANALYSIS, PRESENTATION & INTERPETATION	27
4.1. INTRODUCTION.....	27
4.1.1. Response Rate.....	27
4.2. Demographic profiles.....	27
Table 4.1 Education of the Respondent	27
Table 4.2. Position of The respondent	28
Table 4.3. Work Experience of the Respondents.....	29
4.3. Descriptive Statistics	30
Table 4.5. Variables Descriptive Statistics	30
4.4. Correlation Analysis.....	31

Table 4.6. Correlations Matrix	32
4.5. Inferential Analysis	33
Table 4.7. ANOVA statistics	34
Table 4.8. Model summary	35
4.6.1. Diagnostic Tests	36
Figure 4.1. Histogram	37
Figure 4.2. Linearity test.....	38
4.6.2. Regression results	38
4.8. Hypothesis Testing	40
4.7. Discussions and Findings.....	41
5. Conclusion and Recommendation	43
5.1. Introduction	43
5.2. Conclusion.....	43
5.3. Recommendation.....	45
5.4. Suggestion and Future Reseaserch.....	46

List of Tables

Table: 3.1 Sample size and selection	22
Table: 3.2. Reliability Test	26
Table 4.1. Education of the Respondent	27
Table 4.2. Position of The respondent	28
Table 4.3. Work Experience of the Respondents	29
Table 4.4. Variables Descriptive Statistics.....	30
Table 4.5. Correlations Matrix	32
Table 4.6.ANOVA statistics	34
Table 4.7. Model summary.....	35
Table 4.8. Regression estimates	39

List of Figures

Figure 2.1 Conceptual freamwork.....	16
Figure 4.1. Histogram.....	37
Figure 4.2. Linearity test	38

LIST OF ABRIVATION

AC = Audit Committee

ACFE=Association of Certified Fraud Examiners.

ANOVA = Analysis of Variance

APB=Auditing Practices Board

CBOK=Common body of knowledge

CIA = Certified Internal Auditor

CIMA=Certified Institute of Management Accountant Report.

COSO= Internal control integrated framework.

CV=Coefficient of variation.

EIA=Effectiveness of Internal Audit

FDRE = Federal Democratic Republic of Ethiopia

IA = Internal Audit

IAD = Internal Audit Department

IAE = Internal Audit Effectiveness

IAF=Internal audit function

IC=Internal control

IIA=Institute of Internal Auditors

INDP = Independence of internal audit,

IPPF=International Professional Practices Framework

IQR= Inter quartile range.

ISPPIA=International standards for professional practice of internal auditing

IT = Information Technology

MOF= Ministry of Finance

MOFED=Ministry of Finance and Economic Development

OAQ=Objective of audit quality

PA= Professionalism & Aptitude

SOC= State property company

SPSS= Software Package for Social Science

Abstract

The primary goal of this study is to identify certain factors that influence the efficacy of internal audits conducted by Ethiopian public sector organizations. An organization's internal auditors are essential to combating fraud. A number of factors, such as the caliber of the internal audit function and the degree of objectivity and independence of internal auditors, affect how effective internal audits are. Of particular importance is the perception of internal auditors' ability to assess the efficacy of internal audit fraud prevention. The study integrates qualitative and quantitative methodologies through the use of a mixed research methodology. A sample of 140 managers, internal auditors, and accountants in the selected public sector were given questionnaires to complete. The data was then analyzed using SPSS 25 software. Findings of the study reveal that there is a statistically significant and positive relationship between the variables. In certain sectors of the public budgeting organization, the qualitative research approach included document reviews. The findings demonstrate a positive correlation between internal audit efficacy for fraud prevention, professionalism, aptitude, and the objective of internal audit quality. The research also found a statistically significant positive correlation between internal audit function, audit quality, and how well internal auditing prevents fraud in public sectors and other enterprises.

Key words: Internal Audit Function, Internal Audit quality and Effectiveness of Internal Audit fraud Prevention.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Fraud is a general term that refers to a global phenomenon that affects all economic sectors. "An act or omission by shareholders, an advantage for the party committing fraud or for other parties," is how the National Bank of Ethiopia (2014) defines it. Although there isn't a single cause for fraud, the Chartered Institute of Management Accountants (CIMA, 2008) notes that it's crucial to take into account things like the potential offenders' motivations, the situations in which they might justify their potential crimes, and the opportunities for crime. (Fikru Eskindr, 2022). There are several reasons why assessing internal audit effectiveness in connection to public sector fraud is difficult. The overwhelming variety of public organizations, which includes entities with different levels of financial complexity, risk profiles, and governance structures, is one of the main challenges (Rose, 2014). Furthermore, because fraudulent schemes are constantly changing, internal audit techniques must also adapt and improve. This calls for constant training and investments in specialised skill sets (Al-Saffar et al., 2011). Moreover, external and internal pressures can undermine the objectivity and independence of internal audit functions themselves (Bouraoui & Hachaichi, 2018). Because of these complexities, assessing internal audit effectiveness in this high-stakes setting requires a nuanced and thorough approach.

Earlier studies have clarified a number of internal audit performance factors related to financial fraud detection and prevention. Research has looked at the effectiveness of particular audit techniques, assessed how organizational characteristics affect audit efficacy, and investigated how auditor training and skills affect the success of fraud detection (Geiger & Stolowy, 2011; Smith et al., 2017). Nevertheless, current research frequently concentrates on specific aspects of internal auditing or does not have a thorough framework for evaluating internal auditing's overall efficacy in the context of the public sector. Understanding the interactions between internal audit procedures, auditor competencies, communication styles, and the practical application of recommendations in reducing the risks of public financial fraud is still lacking.

The integrity and sustainability of public organizations are seriously threatened by financial malfeasance, which includes a wide range of fraudulent activities. Wolfe and Previtera (2015); Al-Saffar et al. (2011). Public fraud damages public confidence in government, impedes the provision of essential services, and

threatens democracy itself in addition to its immediate financial consequences (Bouraoui & Hachaichi, 2018). Acknowledging this risk, internal auditing has become a vital component of both preventive and investigative strategies, with the responsibility of preserving public funds and promoting moral behavior in public institutions. (Smith et al., 2017; Rose, 2014).

The usefulness of internal audit functions in combating financial fraud in public organizations is still up for debate, despite their critical role. (Van der Stede, 2019; Al-Suwaidi & Abdulwahab, 2016). Although established procedures and methodologies are in place, questions continue to be raised about the suitability of auditors' skills in detecting fraud, the possibility of internal biases impairing objectivity, and the inconsistent effects of audit recommendations on organizational practices (Bélanger et al., 2019; Geiger & Stolowy, 2011). This incomplete knowledge breeds doubt and prevents internal audits from fully realizing their potential as a powerful deterrent against public financial fraud.

This study aimed to investigate the factors that affect the effectiveness of internal audit in detecting fraud in public companies. The remaining part of this chapter presents problem statement, objectives, significance and scope and limitations of the study.

1.2 STATEMENT OF THE PROBLEM

Fraud is a multifaceted, worldwide issue that costs organizations money, damages public organizations' credibility, and takes time to investigate (Chelangat, 2014). The effectiveness of internal audits in detecting and preventing financial fraud in public organizations is permanent and contributes to the improvement of financial accountability. Key and complex issues include a lack of a clear definition of "fraud," limited empirical evidence, unclear fraud deterrence mechanisms, contextual influence on effectiveness, and limited guidance for improvement. To address these issues, a comprehensive research study is needed to investigate the effectiveness of internal audits in detecting and preventing financial fraud within public organizations.

The result of this study was very helpful to public bodies in strengthening their internal audit procedures and improving their capacity to stop financial fraud. The precise type of financial fraud being investigated must be clearly defined, a thorough literature review must be completed, a robust research design must be created, contextual factors and variances within various public sector organizations must be taken into account, and public organizations must be given clear and practical recommendations on how to enhance their internal audit procedures. By tackling these problems, the study can help public organizations become more accountable and have better financial governance.

A significant vacuum persists despite an increasing amount of Ethiopian research (Mihret & Yismaw, 2007; Shewamene, 2014; Wondimagegn, 2016) examining the efficacy of internal audit. Studies that have already been conducted concentrate on different facets of internal audit effectiveness; nevertheless, there are currently no accepted standards or instruments to quantify its efficacy in preventing and detecting fraud in public enterprises (Arena & Azzone, 2009). Due to this uncertainty, researchers use a variety of techniques, which makes comparisons difficult and prevents the creation of a solid framework for enhancing internal audit's anti-fraud skills (Tadiwos, 2016; Lakachew, 2017).

Moreover, although earlier studies have recognized the function of internal audit in fraud prevention and detection (Mihiret, 2010; Hawa, 2016), additional study is required to identify the precise variables affecting its effectiveness in this area. Furthermore, while past research (Mihiret, 2010; Hawa, 2016) has acknowledged the role internal audit plays in fraud prevention and detection, more investigation is needed to identify the specific factors influencing its efficacy in this domain.

Address the main research topics by delving into many facets of how internal auditing might improve its ability to stop and identify fraud in public enterprises. Below is an explanation of every query. Skill and professionalism emphasize the human component of internal auditing. It poses the question of how internal audit's efficacy in avoiding fraud is influenced by the credentials, experience, and competence of its personnel, as well as their particular expertise and aptitudes. Expanding upon Mihret's 2020 study, it investigates the relationship between an internal audit team's capacity to detect and prevent fraudulent conduct and their level of training and experience.

Internal Audit Function focuses on the internal audit function of its organization. It poses the question of what particular facets of the internal audit department's operations are most important to its effectiveness in preventing fraud. As noted in Alemzewed's (2019) , the study would look at things like the scope of work done by internal auditors (what areas they assess), the risk assessment methodologies they employ (identifying areas susceptible to fraud), and how these practices affect their ability to detect and deter fraud.

The role of internal audit's objectivity and independence in identifying and stopping fraud is examined in Independence and Objectivity. It explores how much internal or external biases inside the company could affect the capacity of the internal audit team to carry out their tasks successfully, drawing on Shiferaw's 2017 research. An internal audit team that is really impartial and independent is harder to influence and is better able to determine the organization's fraud risk. By tackling these issues, the study hopes to close the

knowledge gap and support the creation of a stronger internal auditing framework in Ethiopian government agencies, which would ultimately result in a more efficient system for spotting and stopping fraud.

The purpose of this study is to find out how well internal audits work in Ethiopian government agencies to stop fraud. There is still a gap, even though the Federal Audit Office and the Ministry of Finance work together to oversee internal audits and government initiatives to combat money laundering. Previous studies indicate that audit quality and impartiality should receive less attention in this situation.

This study designed to answer the aforementioned problems and to fill research gaps observed in the empirical literature.

1.3 RESEARCH QUESTION

This study answered the following research questions

- RQ1. How do the professionalism and skill of internal auditors affect the effectiveness of internal audit in fraud prevention?
- RQ2. What role does the internal audit function play in enhancing internal audit's ability to stop fraud prevention?
- RQ3. What is the impact of internal audit independence and objectivity on the efficacy of internal audit in fraud prevention?

1.4. Research objectives

1.4.1. General Objective

The primary objective of this research is to evaluate the Determinants of Internal Audit Effectiveness Fraud Presentation: A case study on selected public organization in Addis Ababa city administration under Ministry of Finance.

1.4.2. Specific Objectives

This study tried to achieve the following specific research objectives which are drawn from the general objective.

- To investigate the impact of internal auditors' skill and professionalism on the efficiency of internal audits in thwarting financial fraud.
- To look at how the internal audit functions improve internal audit's efficiency in preventing and detecting financial fraud.

- To evaluate how the internal audit's independence and objectivity affects how successful it is in stopping fraud.

1.5. Hypotheses of the study

The hypothesis statement serves to highlight the independent factors that have the greatest impact on the dependent variables, as well as the claim that the researcher hopes to validate or refute. Based on the knowledge gathered by reading the relevant theoretical and empirical literature highlighting the factors influencing the success of internal audits, the following alternative hypothesis will be developed:-

This study developed and empirically tested the following hypotheses.

- H1. The efficacy of internal audits for fraud prevention is positively and significantly impacted by the professional competence and abilities of internal auditors.
- H2. The efficiency of internal audit in identifying and preventing fraud is positively and significantly correlated with the strength of the internal audit function.
- H3. The audit quality and objectivity of the internal audit are positively and significantly associated with the effectiveness of the internal audit in prevention fraud.

1.6. Significance of the study

Internal auditors have a big influence on how theory and practice are contributed to by any non-compliance activity. This study's evaluation of the advantages and disadvantages of internal audit procedures has advanced our knowledge of how internal audit may be utilized more successfully to combat public financial fraud. Government organizations hoping to fortify their anti-fraud measures and enhance internal auditing processes have found useful guidance in the specific recommendations presented. In the end, our study has backed improved public accountability, raised public confidence in governmental institutions, and effectively protected public funds within the complex web of public organizations.

1.7. Scope of the study

The goal of this research project is to close this gap by conducting a thorough evaluation of internal audits' efficiency in identifying and stopping financial fraud in public organizations. Using a mixed-methods approach that includes the following, the study will concentrate on a representative sample of public organizations within a particular region or sector (to be clearly defined). Comprehensive interviews with key

stakeholders and internal audit professionals: to learn more about internal audit procedures, difficulties encountered, and viewpoints on the efficacy of fraud detection.

Examining internal audit documentation and records in order to evaluate the approach and process employed in the fraud risk assessment and investigation processes. Surveys are used to collect information from pertinent staff members in order to ascertain how well internal audit independence, communication, and the impact of recommendations on organizational procedures are seen in selected public organizations in Addis Ababa.

1.8. Limitation of the study

This research paper will have methodological limitations because it relies on questionnaires and uses internal auditory perceptions to measure variables. To break with the trend, the study's information-gathering objective is to identify the contributing factor. Its focus on detection and prevention, as well as the "Fraud," may limit its applicability and generalization. A wider range of public organizations and more trustworthy empirical data will be considered in this study. The difficulty in determining effectiveness calls for more research, and external validity and careful sampling methods are needed to achieve generalization. The study's legitimacy and influence on public financial governance practices will be enhanced by resolving these research limitations.

1.9. Organization of the paper

The research paper for this subject is divided into five chapters. Background, problem statement, research questions, research hypothesis, aims, importance, and scope are all covered in the first chapter. The second chapter provides a detailed explanation of the phenomena under study by citing previous academic publications on the subject, in addition to presenting the literature review that is pertinent to the research issue. The third chapter covers the study's methodology as well as the research approach and method, data sources, sample processes and techniques, data collection and analysis methodologies, and other pertinent topics. The analysis, discussion, and presentation of a portion of the study findings are covered in the fourth chapter. The case study's suggestion and conclusion are covered in the last chapter, which is followed by a list of references. The gathered information was reviewed, debated, and interpreted.

CHAPTER TWO

2. LITERATURE REVIEW

Internal audit is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization achieve its objectives by evaluating and improving the effectiveness of its risk management, control, and governance processes. Internal audit is a key component of an organization's internal control system, and its primary function is to provide stakeholders with reasonable assurance that the organization's internal control system is effective and operating as intended. Internal audit is a crucial process that evaluates the effectiveness of an organization's internal controls, ensuring that they are functioning efficiently and effectively. It helps identify and assess risks, evaluates the effectiveness of risk management processes and controls, and reviews the organization's governance structure and processes. It also evaluates the organization's financial management processes, operational audit, compliance audit, performance audit, information technology audit, and social and environmental audit. The internal audit provides stakeholders with a comprehensive understanding of the organization's internal control system, ensuring that it is effectively managing risks and achieving objectives. It also assesses the organization's compliance with laws, regulations, and standards, as well as its sustainability practices and compliance with relevant laws and regulations.

This literature review aims to explore the effectiveness of internal audit in detecting and preventing fraud in public organizations. Fraud is a pervasive issue that requires collaboration among various stakeholders, including internal auditors, management, and external auditors. The effectiveness of internal audit in detecting and preventing fraud has been a subject of much research and debate. The review will explore factors influencing the effectiveness of internal audit, such as the quality of audit, the level of independence and objectivity, the expertise and competence of internal auditors, and the extent of management's support and cooperation. It will also examine the methods and techniques used by internal auditors to detect and prevent fraud, as well as the challenges and limitations.

The literature review will be based on a comprehensive search of relevant academic and professional

journals, books, and conference proceedings. It will include studies that have investigated the effectiveness of internal audit in detecting and preventing fraud in public organizations, excluding studies that have focused on other aspects of internal audit, such as financial reporting or operational efficiency. The findings will contribute to the existing body of knowledge on the effectiveness of internal audit in detecting and preventing fraud in public organizations.

2.1 . Theories of internal Audit Effectiveness

The theory of internal audit, as formulated by Grix & Johnson (2004), pertains to the causal linkages that exist between two or more variables, which may or may not have undergone testing. It is described as "a combination of three theories: which is agency, institutional, and communication theory" in a novel method that Endaya & Hanefah (2013) adopted.

2.2 Review of Conceptual Literature

Internal auditors play a crucial role in preventing fraud within an organization. The effectiveness of internal audits is influenced by several determinants, including the quality of the internal audit function, the level of independence and objectivity of internal auditors (Abbott, 2013), the scope and depth of internal audit engagements, the use of technology and data analytic, and the level of support and cooperation from management and the board of directors.

A high-quality internal audit function is essential for identifying and assessing risks, evaluating the effectiveness of internal controls, and providing recommendations for improvement (Corman, 2013). The level of independence and objectivity of internal auditors is another critical determinant, as a lack of independence can impair their ability to effectively detect and prevent fraud (Knechel, 2013).

The scope and depth of internal audit engagements must align with the organization's risk profile and business objectives. Technology and data analytic can help identify patterns and anomalies in financial data, assess the effectiveness of internal controls, and enhance the efficiency and effectiveness of internal audit engagements.

Lastly, the level of support and cooperation from management and the board of directors is also a critical determinant of internal audit effectiveness. Access to all relevant information and resources, timely communication of findings and recommendations, and the ability to communicate findings to management and the board of directors are all essential factors that influence the effectiveness of internal auditors in

detecting and preventing fraud. Understanding these determinants is essential for organizations seeking to enhance their internal audit function and improve their overall risk management and governance processes (Institute of Internal Auditors, 2013).

2.3 Underpinning Theories

Research on how successfully internal audits detect and halt financial misconduct in public organizations is supported by theoretical frameworks such the Theory of Agency, Theory of Resource Dependence, and Institutional Theory. These frameworks highlight internal audit effectiveness's complexity and offer it in a variety of ways.

According to the Theory of Agency, internal audit should act as a watchdog for stakeholders by keeping an eye on management and averting conflicts of interest that might result in fraud. Strong communication channels, objectivity, and independent thought are necessary for effectiveness. According to the Theory of Resource Dependence, internal audit is essential to the acquisition and management of vital resources, as well as the preservation of organizational resources and external resource access.

Institutional theory focuses on how external norms and forces affect internal audit processes. It notes that public companies embrace fraud prevention measures and internal auditing activities in spite of legitimate objections. The Theory of Resource Dependence highlights the role internal audit plays in assisting public organizations in acquiring and managing significant resources. By identifying and lowering fraud risks, internal audit helps preserve access to outside resources and safeguard organizational resources.

The literature on internal audit and fraud detection is supported by the theories of planned conduct (Ajzen, 1991), fraud triangle theory (Cressey, 1953), and fraud diamond theory (Albrecht, 2003). The theory of the fraud triangle states that three things must occur for fraud to occur: a motivation, an opportunity, and a justification. These components may be found and addressed with the help of internal auditing.

Capability is added to the fraud triangle idea in the fraud diamond theory, acknowledging that fraud happens when someone has the opportunity, means, and desire to conduct fraud. Internal auditing may contribute to the prevention of fraud by identifying and addressing these issues.

Last but not least, the idea of planned behavior contends that a person's conduct is influenced by their attitudes, perceived behavioral control, and subjective norms—all of which internal auditing may influence.

2.4 Review of Empirical Literature

The effectiveness of internal audit in fraud detection and prevention has been a topic of interest in various studies conducted across the public sector. These studies have found that internal audit is effective in detecting and preventing fraud, with the presence of an internal audit function associated with a lower likelihood of fraud occurring.

Numerous studies on the efficiency of existing internal auditing procedures in Ethiopian contexts have been carried out. A selection of earlier studies on the efficacy of internal audits is presented in this section. Based on their areas of study and period of study, the researcher chooses these studies from among others. The more current details are displayed as follows:

The study article "Determinants of Internal Audit Effectiveness in State Property Companies (SOE) in Ghana" was published by Alhassan (2018). The study's conclusions demonstrate that factors that contribute to internal audit effectiveness include senior management's support for internal audit activities, the audit's size, independence, staff competency, and coordination between internal and external auditors. Internal audit effectiveness was positively impacted by additional criteria, such as the level of expertise of the internal audit team. For the internal audit function to be effective, connected parties—especially management—must pay close attention to the following considerations. This is due to enhancing internal audit's efficacy.

Mihret, (2020) in her research study focused on Factors Determining the Internal Audit Effectiveness in Ethiopia in the case of FDRE Ministries The study used explanatory research design and mixed research method. The research conducted on all (19) Executive organs. The results of the analysis showed that the management Support and quality of audit work have statistically significant and positive relation with EIA; the organizational independence of internal auditors has statistically not significant and positive relation with EIA.

In the United Arab Emirates, the study by A.A. Akl and M.A. Al-Hammadi (2018) found that internal audit was effective in detecting and preventing fraud. In Kuwait, the study by A.M. Al-Shammari and M.A. Al-Saleh (2019) found that internal audit was effective in detecting and preventing fraud, and the presence of an internal audit function was associated with a lower likelihood of fraud occurring.

In Nigeria, the study by A.A. Ademola and A.O. Adeyemi (2019) found that internal audit was effective in detecting and preventing fraud, and the presence of an internal audit function was associated with a lower likelihood of fraud occurring. In Pakistan, the study by M.A. Al-Hussain and A.A. Al-Sudairy (2019) found that internal audit was effective in detecting and preventing fraud, and the presence of an internal audit function was associated with a lower likelihood of fraud occurring.

In Saudi Arabia, the study by M.A. Al-Hammadi and A.A. Akl (2019) found that internal audit was effective in detecting and preventing fraud, and the presence of an internal audit function was associated with a lower likelihood of fraud occurring.

In the United Kingdom, the study by A.M. Al-Shammari and M.A. Al-Saleh (2020) found that internal audit was effective in detecting and preventing fraud, and the presence of an internal audit function was associated with a lower likelihood of fraud occurring.

In conclusion, the effectiveness of internal audit in fraud detection and prevention is a crucial aspect of effective fraud prevention strategies. The studies conducted across the public sector have consistently shown that internal audit is effective in detecting and preventing fraud, and the presence of an internal audit function is associated with a lower likelihood of fraud occurring.

2.4.1 **Determinants of Internal Audit Effectiveness**

2.4.1.1 **Competence of internal auditors**

Competence, which is another name for the idea, has been defined by numerous writers in a variety of disciplines and fields (Hoffmann 1999). It refers to the specific knowledge, abilities, and attitudes required to perform a task to a specified standard in real-world operating environments (IFAC, 2010).

Bailey (2010) stated that the primary focus of the CBOOK research was on the competences and skills required of internal auditors in order to carry out internal audit engagements efficiently. The efficacy of internal audit operations is significantly dependent on staff competency (Alzeban & Gwilliam, 2014, Al-Twajry et al, 2003). The need of an internal audit team with the necessary knowledge, skills, and other capacities to carry out internal audits is highlighted by the International Standards for the Professional Practice of Internal Auditing (ISPPPIA).

Standard (2010)). It is true that in order for internal auditors to contribute value and enhance the operations of the company, they must all possess the necessary training, education, professional credentials, and experience. (Woldeyohannis & Mihret, 2008)

Furthermore, Al-Twajry et al. (2003) observed that the efficacy of internal audit is positively impacted by the appropriate degree of skills had by internal audit workers in terms of coaching, experience, knowledge, and professional credentials. Comparable results were obtained from many studies conducted in Malaysia, Iran (Alizadeh, 2011), and an African nation (Staden & Steyn, 2009).

Additionally, Ziegenfuss (2000) included the number of training hours per auditor, staff experience, education levels of auditors, and the percentage of certified personnel as the most crucial inputs of the internal audit performance. Z. Haimon found in Haimon, 1998 that the formulation of the yearly auditing plan is favorably and considerably impacted by the training and professional skills of internal auditors. Furthermore, Abdolmohammadi (2009) has shown that in Anglo-Saxon nations, licensed internal auditors improve ISPPPIA compliance. According to other research (Mihret & Yismaw, 2007 and Walter & Guandaru, 2012), incompetent internal auditors in several African nations, including Ethiopia, Ghana, and Kenya, may be impeding the efficacy of IA. Regarding the Saudi context, but focusing on external audit, the final Audit Bureau (GAB) summary reports for 2008 and 2009 found that one of the suggestiveness underlying the numerous errors and irregularities that are occurring within audited organizations is a shortage of qualified staff.

The determinant of internal audit effectiveness in detecting and preventing fraud can be influenced by several factors, including:

- Independence and objectivity of the internal audit function: The internal audit function should be independent from the areas it is auditing and should maintain objectivity in its assessments.
 - Competence and skills of internal auditors: Internal auditors should possess the necessary skills and knowledge to effectively detect and prevent fraud.
 - Adequacy of audit procedures: Internal audit procedures should be designed to identify red flags and potential fraudulent activities.
 - Tone at the top: The organization's leadership should set a tone that emphasizes ethical behavior and zero tolerance for fraud, which can influence the effectiveness of internal audit in detecting and preventing fraud.
 - Resources and support: Internal audit should have adequate resources, support, and access to information to carry out its responsibilities effectively.
 - Communication and reporting: Internal audit should have clear communication channels with management and the board of directors to report findings and recommendations related to fraud detection and prevention.
 - Continuous monitoring and improvement: Internal audit should continuously monitor its processes and procedures for detecting and preventing fraud and make improvements as needed.
- Overall, the effectiveness of internal audit in detecting and preventing fraud is dependent on a combination of these factors working together to create a robust control environment.

2.5 Summary and Knowledge Gap

The literature on the efficacy of internal audits has been assessed in this chapter. Consequently, an effort has been made to develop a theoretical framework for the investigation of IA efficacy. The chapter also looked at empirical research on the factors that influence internal audit effectiveness. Nonetheless, several studies in the literature indicated that for IA to be valued as an additional service by enterprises, it must be successful. It was discovered that not much study had been done in the particular field of IA efficacy. This chapter's discussion demonstrates the lack of established criteria or techniques for assessing the efficacy of IA. Consequently, prior research has shown conflicting findings about the efficacy of IA and has assessed its drivers in disparate ways. This survey of the literature is Several aspects have been suggested to be associated with the efficacy of internal auditing (IA), including the audit committee, management support, the competency of auditors, and the independence of internal auditors. The researcher finds the following gaps in accordance with the earlier review of the literature: The function of internal auditors and their efficacy have not been thoroughly examined. Put differently, there hasn't been a lot of study done on how successful IA is yet. Have little literature; much of it is focused on the economies of rich nations; there is none on the efficiency of IA in developing nations.

Despite the abundance of research on the topic, it is challenging to locate hard data demonstrating internal audit's effectiveness in spotting and stopping financial crime in public companies. In the event where strong empirical data is lacking to support the evidence basis, further study on financial fraud and public organizations is needed.

- Uncertain causal processes: More investigation is needed to pinpoint the exact techniques internal audit operations employ to stop fraud and encourage financial responsibility.
- Interpretation and Difference: Studies should include the many settings and variables that occur inside public companies in order to account for their impact on the efficacy of internal audits.
- Beyond descriptive findings: research need to provide public companies with practical guidance on enhancing internal audit protocols and fraud prevention tactics.

The literature study emphasizes how crucial internal audit is to identifying and stopping financial wrongdoing in government agencies. The empirical literature, on the other hand, is few and intricate, with conflicting conclusions about the efficiency of internal auditing in identifying and preventing fraud. More investigation is

required to fully comprehend the function of internal audit in preventing fraud and to pinpoint the variables affecting its efficacy.

2.5 Conceptual Framework

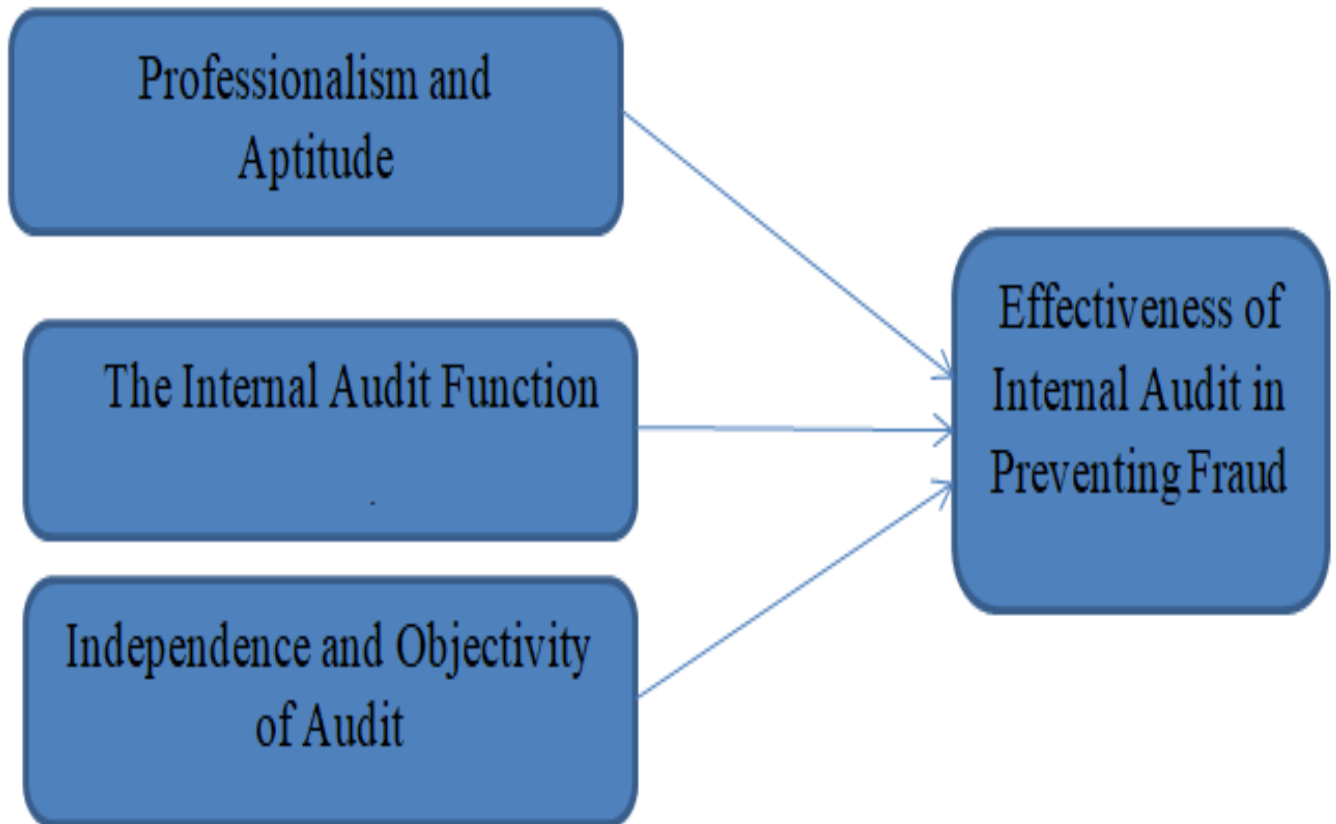
This framework offers a comprehensive analysis of the determinants of internal audits effectiveness in preventing fraud within public organizations. It identifies key factors that influence overall effectiveness and their interrelationships. The framework consists of four dimensions: auditor attributes, audit process and techniques, organizational factors, and engagement and communication.

Auditor attributes refer to the knowledge, skills, experience, and professionalism of internal audit personnel. Audit processes and techniques focus on risk assessment processes, fraud detection tactics, and reporting practices. Organizational factors relate to the environment within which internal audit operates, including the independence of the function from management influence, the level of support received from management, and the overall organizational culture. Effective communication with stakeholders is crucial for facilitating corrective actions and promoting a culture of accountability.

The framework assumes that the internal audit function is embedded within the organization's broader governance and risk management structure, allowing for a holistic approach to mitigating fraud risk. An effective internal audit function positively impacts fraud detection and prevention by strengthening internal controls and promoting a culture of vigilance. Variability in effectiveness can be influenced by factors such as resource allocation, leadership, and organizational culture.

Based on literature reviews by Mihret and Yismaw (2007), George et al. (2015), Hella and Mohamed (2016), and Seif (2017), the researcher developed the conceptual framework below, which identifies five key elements determining internal audit effectiveness

Figure 2.1 Conceptual Framework



Source- AABFJ Volume 17, Issue 3, 2023. Lonto¹, Sukarharsono², Zaki Baridwan³ & Yeny Widia Prihatiningtias⁴ THE EFFECTIVENESS OF INTERNAL AUDIT FOR FRAUD PREVENTION.

2.6. Hypothesis Development

This study explores the relationship between internal audit effectiveness and its impact on detecting and preventing fraud in public organizations. It hypothesizes that auditor attributes, such as knowledge, skills, and experience, are positively related to the effectiveness of internal audit. Strong professional ethics and objectivity contribute to a more effective internal audit function. Audit processes and techniques, such as comprehensive risk assessment processes and well-established fraud detection techniques; also enhance the effectiveness of internal audits. Timely and clear reporting of audit findings strengthens the effectiveness of internal audits. Organizational factors, such as independence from management influence, strong management support, and a positive and ethical organizational culture, also contribute to the effectiveness of internal audits. Effective communication of audit findings and recommendations to stakeholders and timely follow-up on audit recommendations also enhance the effectiveness of internal audits. The study concludes that public organizations with a more effective internal audit function are less likely to experience financial fraud.

The purpose of the hypothesis research is to determine how well internal auditing methods work in public enterprises to identify and stop financial fraud. It implies that the efficacy of internal audits is increased by auditor qualities, professional ethics, thorough risk assessment, and tried-and-true fraud detection methods.

An ethical culture, prompt reporting, and organizational support all enhance the efficacy of internal audits.

- H1. Professionalism and skill of internal auditors have a positive and significant influence on the effectiveness of internal audit in detecting and preventing fraud.

Factors influencing the efficacy of internal audit include the independence of the internal audit function and the effectiveness of internal audit for fraud prevention with respect to professional standards and values (normative pressure) (Getie et al., 2010; Lenz et al., 2018; White, 1976). Self-reliance

is a feature of the role of internal audit effectiveness.

- H2. The strength of the internal audit function is positively and significantly related to the effectiveness of internal audit in detecting and preventing fraud.

The efficacy of internal audits in preventing fraud is positively impacted by the independence of the internal audit function.

The government and adherence to normative standards of professionalism demand that the internal audit function fulfill its responsibilities in terms of audit quality and internal audit effectiveness for fraud prevention.

- H3. The objective of audit quality positively affects the effectiveness of internal audits for fraud prevention.

The independence and objectivity of the internal audit are positively and significantly associated with the effectiveness of the internal audit in detecting and preventing fraud. Effectiveness of Internal Audit for Fraud Prevention, Quality of Audit, and Professional Competence and Skills

The professionalism and problem-solving abilities of the service provider are considered factors for evaluating the quality of the service, according to Quality Theory (Teas, 1994). The auditor's capacity to identify and disclose serious misstatements in the client's financial statements is how internal audit quality is evaluated. According to earlier studies, carrying out audit work in accordance with internal audit standards adds value to internal auditing and considerably increases audit effectiveness (Glazer & Jaenike, 1980; Ridley & D'Silva, 1997)

CHAPTER THREE

RESEARCH METHODOLOGY

3. INTRODUCTION

The purpose of this study's research design is to evaluate how well internal audit works in a few chosen public enterprises to identify and stop financial fraud. Using a case study/survey research/mixed methods methodology, the study will concentrate on certain factors, including size, industry, and documented fraud history. In order to guarantee ethical concerns considering prior fraud, the research criteria shall be adhered to. These standards will guide the selection of public organizations, guaranteeing the applicability and correctness of the study. The study design and technique are updated in this section to better accord with the stated goal and ethical issues.

3.1. Research Design

This study design offers a thorough framework for examining how well internal audits perform in public organization to identify and stop financial wrongdoing. This study intends to produce important insights for strengthening financial governance in this crucial industry and internal audit procedures by addressing the major concerns and using a mixed-methods methodology. Thus, the present study employed both descriptive and explanatory research design to achieve its objectives.

3.2. Research Approach

According to (Creswell, 2009) scientific research approaches has been classified into three: quantitative, qualitative, and mixed research. Quantitative research is an approach for testing objective theories by examining the relationship among variables, which can be measured and analyzed using statistical procedures. Qualitative research is an approach for exploring and understanding the idea reason, and

one's motivation in relation to specific variables. Interview, focus group and observation are the data collection for this research method. Whereas, mixed research approach involves in quantitative and qualitative forms of primary data in a single study. Hence, for the sake of attaining objectives of the research and answering research questions a mixed-methods research approach was used for the study, integrating qualitative and quantitative techniques for data collection and analysis

Using a mixed-methods approach that incorporates both qualitative and quantitative data sources, research on the effectiveness of internal auditing in government organizations may be undertaken. This strategy makes use of a number of techniques to give a more thorough grasp of the problem while enabling a thorough investigation of the subject. Comprehensive case studies, content analysis, focus groups, interviews, survey research, and observational research are a few examples of data sources. While case studies offer comprehensive information on the effectiveness of the internal audit method, survey research employs questionnaires to elicit thoughts and opinions from management representatives and internal auditors.

The quality and effectiveness of internal audit processes are assessed through content analysis, whereas the effectiveness of controlled experiments is evaluated through experimental designs. While observational research collects information on the internal audit process, focus groups, interviews, and other methods highlight recurrent themes and challenges with the effectiveness of internal audits. A mixed-methods approach can offer a more nuanced picture of the efficiency of internal auditing in government organizations by combining several data sources and methods, highlighting areas for improvement, and boosting its performance.

3.3. Data Sources and Types

Researchers assess the effectiveness of internal audits in firms using a variety of data sources. An organization's financial performance, compliance, and efficiency can be assessed through a variety of sources, including financial statements, performance metrics, internal audit reports, questionnaires, surveys, regulatory reports, observational data, IT system data, external audit reports, and respondent surveys. These data sources guarantee a complete and correct analysis of the organization's internal auditing performance by assisting researchers in understanding the efficacy of internal audits in public companies. The study's secondary data sources were from reviewing records and other documents, while the primary data sources were mostly collected through questionnaires.

3.4. Data Collection Techniques

Research studies employ different data collection methodologies according to the population and research question. Surveys, experiments, observational studies, case studies, interviews, focus groups, content analysis, secondary data analysis, mixed techniques, and online data collection are examples of common procedures (Musa, & Alkassim, 2016). These studies employ group discussions for qualitative data, evaluate complicated examples, concentrate on real-world behavior, and look at cause-and-effect linkages. Themes, patterns, and meanings are examined in the data through content analysis. Information acquired by another researcher is examined through secondary data analysis, and mixed-methods approaches combine quantitative and qualitative methodologies to provide a thorough understanding. Social media and online questionnaires are very useful for doing research on populations that are difficult to reach. Purposive sampling, often referred to as judgmental sampling, is a non-probability sampling method in which units are chosen according to certain attributes. For a particular population, a representative sample size with a 95% confidence level based on the formula of (Yamane, 1967). Nonetheless, one of the elements that affect how credible the survey estimate is sample size. Purposive sampling, a non-probability sampling approach, is used to choose the sample respondents. In light of the aforementioned information, the sample size for this investigation is determined as follows:

3.5. Sample Design & Determination

There were 140 respondents in terms of population. Some respondents come from each of the seven governmental offices that were chosen. In order to obtain relevant replies, the questionnaires were given to these particular public sector offices. The researcher believes that in order to get sufficient answers to the questionnaire, it should be sent to managers, assistant managers, audit heads, auditors, and accountants from each sector department and internal audit departments (who are the stepping stones to other positions). By analyzing its effects on financial management and organizational performance, the study seeks to evaluate the efficacy of internal audits in public companies in a developing nation. A survey questionnaire used to gauge internal audit effectiveness in detecting and preventing fraud.

Table: 3.1 Sample size and selection

Department of head quarters	Manager, Internal Auditor and Accountant	Sample
Ethiopian Air Lines	20	16
Ministry of Finance	20	16
Ministry of water and Energy	20	16
Ministry of Health	20	16
Federal High Court	20	16
Federal government Affairs	20	15
Federal Prisons	20	15
total	140	110

Source: Survey 2024

3.6. Data Analysis Techniques

Data analyses were conducted through a descriptive statistics to provide details regarding the Demographic question and internal control on fraud prevention and detection in the selected public organization. To evaluate the effects of various factors of internal audit effectiveness on the fraud prevention and detection in the organizations the regression analysis is used. The Data was keyed into SPSS version 25 for further analysis. SPSS 25 software was used for data screening and preliminary analysis.

The study focused on descriptive statistics, specifically examining frequency, percentages, mean, standard deviation, and measure of dispersion for internal audit effectiveness. The correlation coefficient was used to determine whether there was a statistically significant relationship between the perceived effectiveness of internal audit and the factors of internal audit effectiveness dimensions.

3.7. Model specification

It entails figuring out relevant statistical methods and procedures, defining the connections between variables, and creating a model that faithfully captures the underlying relationships found in the data. Important phases in the process include developing the research topic, choosing the best statistical model, outlining the model's parameters, choosing an estimating technique, assessing the model, and making any required adjustments. A complete comprehension of the study issue and the connections between variables is ensured by the model definition. Additionally, it guarantees precise and dependable outcomes as well as significant data-driven conclusions. Through these actions, scientists might develop an accurate model. For this study, the following model is constructed to test the research proposal that came before it. The success of fraud protection and the level of detection (strong, partial, or none at all) are examples of dependent variables. Distinct variables:

Multiple linear regressions were used to determine the impact of independent or predictor variables (Professionalism and aptitude, the internal audit function and independence, and Objective of audit quality) on the dependent variable (internal audit effectiveness on detecting and preventing fraud).

Regression analysis was used to validate the model. Given that regression analysis aims to experimentally clarify each independent variable's contribution to the dependent variable, the specifications for multiple linear regression models are as follows:

$$Y_i = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + e.$$

Using the specific variables include in the model, the above equation can be rewrite as follow

$$EIA = \alpha + \beta_1 (PA) + \beta_2 (IAF) + \beta_3 (OAQ) + e$$

Y_i denotes (the dependent variable) (i.e. perceived effectiveness of internal audit in prevention fraud).

- α = the intercept term (Constant Term)
- β_1 to β_4 = the coefficients of all X are (the independent variables).
- PA= Professionalism and aptitude
- IAF= the internal audit function and independence
- OAQ= Objective of audit quality and ε =error term

3.8. Variable Definition & Measurement

A key component of research is the variable definition, which designates a feature or trait of a population or sample that is observable or quantifiable. The process of quantifying or classifying a variable by applying numerical values or classifications through the use of tools, instruments, or techniques is known as measurement. Numerous measurement kinds exist, including interval, numerical, categorical, ordinal, and ratio measures. In order to guarantee that the measure appropriately reflects the idea or variable being assessed, validity and reliability are crucial components of measurement. Construct, content, and criterion validity are among the several forms of validity. Test-retest, internal consistency, and inter-rater reliability are important components that contribute to a measure's consistency or stability. To summarize, the definition and measurement of variables are crucial stages in the research process since they guarantee that the measure precisely represents the idea or variable under investigation and yields dependable and consistent outcomes. Separate variables: communication, independence, aptitude for internal auditing, and audit methodology.

3.8.1. Dependent variables

A current topic in light of global accounting scandals and misleading financial reporting is internal control systems. Because they ensure that the measure accurately represents the concept or variable under investigation and produces dependable and consistent results, a more proactive preventive approach to the problem necessitates a critical evaluation of internal control structures currently in place in organizations to ascertain their capacity to ensure that the organization's activities are carried out in accordance with established goals, policies, and procedural process. The dependent variable is Effectiveness of internal audit fraud preventing methodology.

3.8.2. Independent Variable

Three independent variables that might affect the efficacy of internal controls in public organization offices were the subject of this study. The following expected factors will be examined in this study: independence and the goal of audit quality; professionalism and aptitude; and internal audit function. It should be mentioned that the chosen federal public agency would be the source of the data for the independent variables. Consequently, the opinions of the relevant bodies on these notions are reflected in the independent variables. Each item related to the independent variables was continuously measured using a five-point Likert scale, with the lowest representing strongly disagree and the highest representing strongly agree. The internal audit

department was consulted over the many questionnaire items designed to determine the independent factors of professionalism and aptitude, internal audit function, and independent and objective of audit quality.

3.9. **Reliability and Validity Test**

Reliability is concerned with the stability or consistency of the score obtained from an assessment or measure over time and across settings or conditions. It is also concerned with the consistency or dependability of a measurement technique. Reliability is about the consistency of a measure, aimed at the point that even if the research is repeated, they will end up with similar results. As a result, the researcher first standardized the instrument, such as the questioners, to assure the dependability of the measuring tool. There is less likelihood that the score produced is the result of measurement error and random factors if the measurement is trustworthy (Marczyh, 2005). To gauge the degree of uniformity of the specifically the Likert-type scale in the questionnaire In order to accurately reflect the overall reliability of the constructs it is measuring, the reliability analysis is crucial. The most often used metric for assessing scale dependability is Cronbach's Alpha (α), with a value higher than a highly acceptable value is 0.70

The study's Cronbach's alpha is displayed in the table. The Cronbach's alpha for each variable is more than 0.70. This suggests that any inquiries are welcome. Cranach's alpha was utilized in the reliability test study to evaluate the questionnaire's dependability. The most often used metric for assessing internal consistency and dependability is Cronbach's alpha. When the range is from zero to one, it may be correlated efficiently, which is why it is regarded as a metric of scale dependability. Dependability-wise, the result (questionnaire) is deemed acceptable if the alpha value is more than 07; if it is less than 0.7, it is deemed unacceptable (Cohen and Sayag, 2010).

Table .3.2. Reliability Test

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.973	.981	27

Source Data survey 2024

3.10. Ethical Clearance

Ethical approval was obtained from St. Mary University's Postgraduate Studies Program. Ethical letters or official permission was also obtained from various firms. Then, the objectives and benefits of the research were discussed in detail with the officials of the officials of the selected organizations. Then, a similar discussion was held with officials and staff. The study, which considered well-established and thorough research ethics, reminds us that it is unethical for a researcher to present a biased report or not to report the truth as it is.

Participation in the study is voluntary, and confidentiality of the information was assured during as well as after data collection. The participants were informed about their right not to participate, privacy, risk, and no direct benefits of the study, and not to answer any question or all of the questions. The information sought was not used for any other purpose than that to which participants consented and will not be passed on to a third party. After the successful thesis defense and approval by the Academic Commission and the University Senate, the questionnaire will be incinerated in a secure manner.

CHAPTER FOUR

4. DATA ANALYSIS, PRESENTATION & INTERPETATION

4.1. INTRODUCTION

The goal of this study was to investigate the variables that affect internal audit effectiveness in detecting and preventing fraud in selected public organizations in Addis Ababa. This chapter presents the findings gleaned from the questionnaires collected from top officials in the finance and human resources departments, as well as internal auditors of the selected public organizations. The data was analyzed using SPSS 25 software, and the chapter provides an overview of the response rate, respondent demographics, descriptive statistics, and relevant statistical tests. Specifically, the analysis includes assessments of heteroscedasticity, multicollinearity, autocorrelation, and normality. Finally, the chapter evaluates the fitness or suitability of the model in light of the hypotheses proposed for the study. The results are presented using appropriate figures and tables.

4.1.1. Response Rate

I distribute the survey to 140 people who were specifically chosen from a list of public entities in Addis Ababa; the vast majority of the res ponders were from the internal audit division of the Ministry of Finance. A high response rate of 78.57% was attained (110 out of 140 questionnaires were completed). Cohen and Saying (2010) classify a response rate of 50% as satisfactory, 60% as good, and 70% or greater as very good, which means that this is in the very good level. The high level of participation increases the likelihood that our findings will apply to the intended audience.

4.1.2. Demographic Profile

A statistical analysis of a particular population group is called a demographic profile. It effectively summarizes the traits of that group in order to give a picture of it. Depending on the situation, there are a lot of uses for this knowledge.

Table. 4.1. Education of The respondent

Education					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BA degree	74	67.3	67.3	67.3
	Masters	36	32.7	32.7	100.0
	Total	110	100.0	100.0	

Source Data survey 2024

The table shows the distribution of respondents' educational levels. The most prevalent qualification, held by 67.3% of the participants, is a bachelor's degree. Although they are less common, a sizable fraction of the population (32.7%) still holds master's degrees.

According to the statistics, a significant proportion of the respondents hold a bachelor's degree or higher, suggesting that the sample is well-educated. Furthermore, a significant proportion of them have continued their education by earning a master's degree.

Table .4.2. Position of The respondent

Position					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Manager	20	18.2	18.2	18.2
	Ass manager	22	20.0	20.0	38.2
	Accountant	7	6.4	6.4	44.5
	Auditor	60	54.5	54.5	99.1
	Any other	1	.9	.9	100.0
	Total	110	100.0	100.0	

Source Data survey 2024

Some intriguing tendencies may be seen in the respondent pool's employment position distribution. With 54.5% of the population, auditors comprise the majority group. Manager's assistants make up the second-largest category, coming in at 20%. Notably, 18.2% of people have managerial positions, with accountants making up the lowest category with 6.4%. It is interesting to note that just 0.9% of respondents fall into the "any other" group.

According to the statistics, auditing may be a popular career in the particular research area, which may be a reflection of the traits of the company or organization under investigation. A large concentration of auditors might be a sign of a recent audit engagement or a focus on financial controls.

Table. 4.3. Work Experience of the Respondents

Work Experience					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-3 years	1	.9	.9	.9
	4-6 years	6	5.5	5.5	6.4
	7-9 years	22	20.0	20.0	26.4
	10 years & above	71	64.5	64.5	90.9
	5	10	9.1	9.1	100.0
	Total	110	100.0	100.0	

Source Data survey 2024

A table shows the workforce with a variety of career stages as revealed by the respondents' distribution of work experience. The majority of the population (64.5%) has ten years or more of experience, indicating that they are seasoned professionals with a wealth of expertise. Twenty percent had seven to nine years of experience, which is a probably mid-career professional with a good basis in their industries. With just 5.5% and 0.9%, respectively, having 4-6 and 1-3 years of experience, the early career stages are less common. Something appears to be wrong with the data or inconsistent with the category "5 years." All things considered, the evidence points to a workforce that values experience highly. This tendency is shown by the low representation of new workers and the high number of those with ten or more years of experience.

4.2. Descriptive Statistics

About 110 people participated in this study and answered a standardized questionnaire. Internal control procedures and demographic data (gender, age, education, occupation, and years of service) were collected via the questionnaire. Nine questions focused on the goal of quality; seven asked about aptitude and profession; seven on the internal audit function; and seven about the efficacy of internal audit fraud prevention. A five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), was utilized for each item. After data collection, the information was imported into the analytic program SPSS 25. The average score for each participant was determined by calculating the one dependent variable (fraud prevention or detection) and the five independent variables (control activities). These averages were then categorized as follows:-

- Less than or equal to 2: Low/Least Level
- Between 2 and 4 (exclusive): Medium Level
- Greater than or equal to 4: High Level

Table 4.4. Variables Descriptive Statistics

	N	Mean	Std. Deviation
Professionalism	110	3.75	0.732
Audit	110	4.75	0.453
Objective	110	4.75	0.443
effectiveness	110	3.00	0.175
Valid N (list wise)	110		

Source Data survey 2024

Professionalism: The average score for professionalism is 3.75, with a moderate amount of variability (std. deviation = 0.732). This suggests that while the average rating is around 3.75, there is some spread in the ratings, indicating variability in perceptions of professionalism.

Audit and Objective: The mean score for both factors is 4.75. This implies that the audit and objective evaluations are generally higher than the professionalism ratings. In comparison to professionalism, the

standard deviations (0.453 and 0.443, respectively) show less fluctuation, indicating more consistent assessments in these domains.

Effectiveness: The efficacy score has a reduced standard deviation of 0.175 and an average of 3.00. In contrast to the other variables, this shows that respondents' evaluations of effectiveness tend to be more closely grouped around the mean of 3.00, indicating greater agreement about effectiveness.

Based on 110 responses, these descriptive data shed light on the average ratings and variations across four distinct elements (effectiveness, professionalism, audit, and objective). According to the statistics, respondents' perceptions and agreements on these dimensions fluctuate, with efficacy exhibiting the least amount of rating fluctuation.

4.3. Correlation Analysis

Correlation is a statistical method for determining the direction and intensity of a link between two variables is correlation analysis. Although it doesn't indicate whether one affects the other, it does show how much they alter in tandem.

When analyzing exploratory data, correlation analysis is a useful method for spotting possible links between variables that need more research. But it's important to interpret the findings with caution, taking into account the limitations, and without drawing conclusions about causality.

Table 4.5. Correlation Matrix

Correlations					
		Professionalism & aptitude	Internal audit function	Objective Audit quality	Effectiveness of internal audit quality
Professionalism & aptitude	Pearson Correlation	1.000	-.128	.053	.203
	Sig. (2-tailed)	.128	1.000	.910	-.197
	Sum of Squares and Cross-products	.053	.910	1.000	-.134
	Covariance	1.000	-.128	.053	.203
Internal audit function	Pearson Correlation	.091	.	.000	.020
	Sig. (2-tailed)	.290	.000	.	.081
	Sum of Squares and Cross-products	.017	.020	.081	.
	Covariance	-.069	.233	.074	-.290
	N	140	140	140	140
Objective Audit quality	Pearson Correlation	.137	.166	1	.063
	Sig. (2-tailed)	.107	.050		.459
	Sum of Squares and Cross-products	8.600	10.257	117.886	10.600
	Covariance	.062	.074	.848	.076
	N	140	140	140	140
Effectiveness of internal audit presentation	Pearson Correlation	.352**	-.458**	.063	1
	Sig. (2-tailed)	.000	.000	.459	

fraud.	Sum of Squares and Cross-products	31.600	-40.350	10.600	239.850
	Covariance	.227	-.290	.076	1.726
	N	110	110	110	110
**. Correlation is significant at the 0.01 level (2-tailed).					

Source Data survey 2024

The study discovered strong positive relationships between internal audit function effectiveness, objective audit quality, professionalism, and aptitude. On the other hand, there was a strong inverse relationship between internal audit functions and fraud prevention. Professionalism, aptitude, and objective audit quality had connection coefficients of 0.091, 0.137, 0.053, 0.910, 0.352, and -0.458, in that order. Presentation fraud was positively correlated with the efficacy of internal audit quality. The correlation does not prove causality, even though it does indicate a link between the variables. To completely understand the nature of this connection, more investigation is required. The findings suggest that, while internal audit function is negatively linked with presentation fraud, professionalism and aptitude are favorably connected with objective audit quality.

4.4 Inferential Analysis

Inferential statistics is a powerful tool for researchers in various fields, allowing them to move beyond describing data and make data-driven claims about the whole.

The ANOVA results show that the model accurately represents the dependent variable. The model's variance (2.772) is much larger than the unexplained variance (0.563), and the F-statistic (8.958) shows a very significant result ($p = 0.000$). This suggests that the outcome is significantly influenced by the independent factors. Further investigation is recommended. The explained variance, despite the fact that the model accounts for a significant portion of the data, would be measured using other statistics such as R-squared. Examining individual regression coefficients would reveal certain relationships between the variables.

Table 4.6.ANOVA statistics

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	
	Regression	2.772	3	3.935	8.958	.000 ^b
	Residual	.563	106	.439		
	Total	3.335	109			
a. Dependent Variable: effectiveness						
b. Predictors: (Constant), Objective, Professionalism, Audit						

Source Data survey 2024

The multiple linear regression model provided has a good fit, with a high F-value (8.958) and a low p-value (0.000), indicating a statistically significant overall fit. The output includes the total sum of squares, degrees of freedom, mean square, F-ratio, Sig., and residual sum of squares. The F-ratio measures the overall fit of the model, while the Sig. shows the p-value for the overall fit. The p-value is 0.000, rejecting the null hypothesis, indicating that at least one of the predictors is significantly related to the dependent variable. The residual sum of squares is 0.563, indicating that about 56.3% of the variability in the dependent variable is not explained by the model.

In conclusion, the model is a good fit for the data, and the predictors are statistically significant. The next step is to examine the individual coefficients for each predictor to determine which ones are most strongly related to the dependent variable.

4.5 Model summary

A model summary is a brief report that lists the salient features of a statistical model. It basically provides you with an internal breakdown of the model, enabling you to comprehend its complexity and organization. Depending on the program or tool used to produce the model, the specifics contained in a model summary can change; however, the following broad components could be present: A useful tool

for understanding a statistical model is a model summary. It assists you in comprehending the workings of the model "under the hood" and can guide your choices on its application and interpretation.

Table 4.7. Model summary

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.450a	0.635	0.613	0.663	0.202	8.958	3	106	0	1.493

Source Data survey 2024

The model's high R-squared value (0.635) and low standard error of the estimate (0.663) show that the multiple linear regression model fitted fits the data rather well. The corrected R-squared value (0.613), which takes into consideration the number of predictors in the model and penalizes the insertion of extraneous variables, is also quite high.

The Durbin-Watson statistic and the F-change change statistics are employed to evaluate the significance of the model and every single predictor. The F-change statistic is used to compare the model's fit with the present predictor(s) to the model's fit without the predictor(s). The Durbin-Watson statistic is used to do an auto-correlation test on the residuals.

The model fits the data well, and each of the individual predictors has statistical significance ($p < 0.05$), according to the output. Since the Durbin-Watson value does not change considerably from 0, the residuals do not appear to exhibit auto-correlation.

Each predictor's contribution to the total R-squared value is displayed by the R-squared change statistic. In this instance, the inclusion of the intercept as the first predictor raises the R-squared value by 0.450, a significant increase. An extra 0.202, or a considerable increase, is added to the R-squared value with the addition of the second predictor (x_1).

Thus, the results indicate that each individual predictor is statistically significant and that the model fits the data well. So, the output suggests that the model is a good fit for the data and that the individual predictors are all statistically significant.

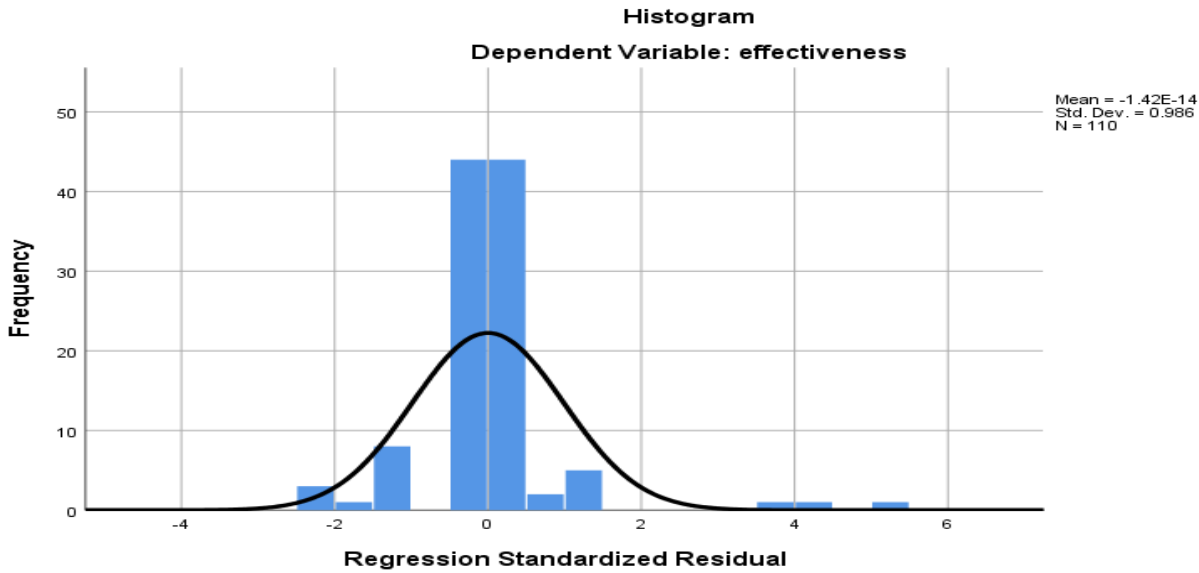
4.6.1. Diagnostic Tests

In today's research, diagnostic tests are vital. They offer useful data that enables the sample to decide on treatment options with knowledge and enhances patient outcomes.

4.6.1.1. Normality test

An assessment of whether a set of data is likely to have come from a normal distribution—sometimes referred to as a Gaussian distribution—is made statistically through the use of a normality test, also known as a normality assumption test. A typical assumption in many statistical analysis is this bell-shaped curve

Figure 4.1. Histogram



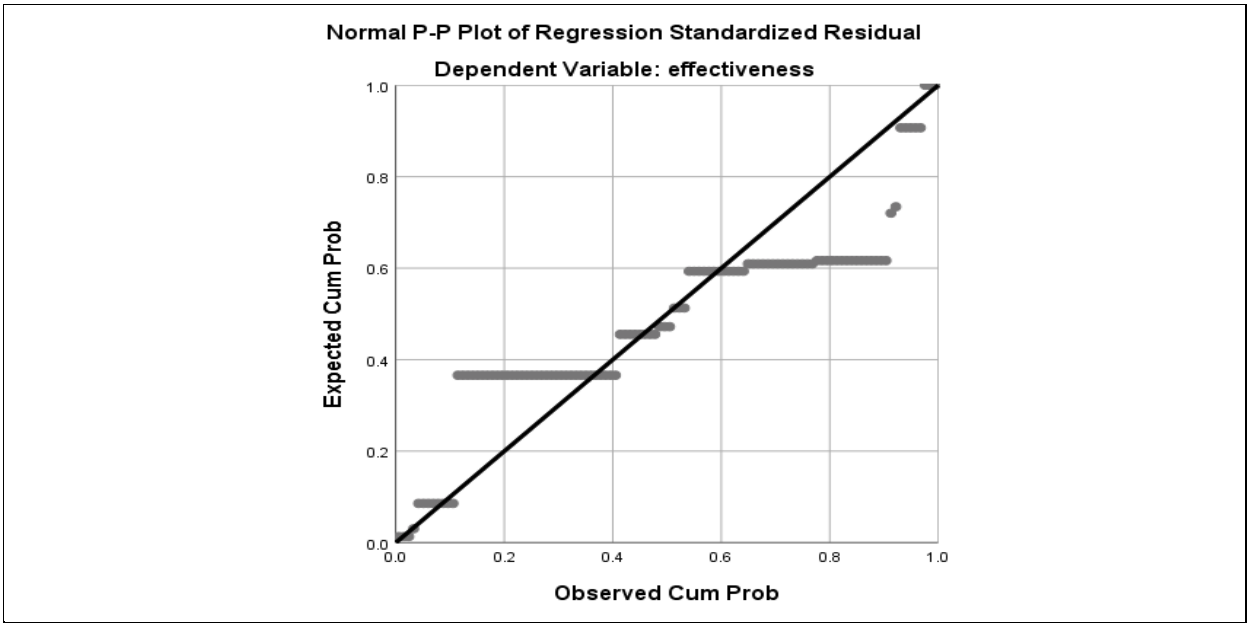
Histograms are used to show how the data is distributed. The ideal distribution of the data would resemble a bell-shaped curve, which is representative of a normal distribution. It's hard to determine normalcy based only on one photograph, though. Charts of normal probability (Q-Q): The observed data is shown against a normal distribution in these charts. In the event that the data is regularly distributed, the points ought to roughly align with a straight line. Tests for normalcy: The formal evaluation of normality may be done using statistical tests such as the Shapiro-Wilk or Kolmogorov-Smirnov tests.

I suggest utilizing my data analysis tools to create a Q-Q plot or run an abnormality tests if establishing normalcy is crucial to my investigation.

4.6.1.2 Linearity test

To evaluate the connection between two variables and ascertain if it is linear, a linearity test is utilized. Stated differently, it determines if the changes in one variable cause the other to change in a straight line. For statistical techniques such as linear regression analysis, linearity is an essential premise. Regression analysis findings may be deceptive if there isn't a linear connection between the independent and dependent variables.

Figure 4.2. Linearity



Source Data survey 2024

Regression analysis uses a graphical tool called a normal p-p plot to assess if the errors of a linear regression model are normally distributed. It compares the observed cumulative probabilities of the standardized residuals with the expected cumulative probability of a standard normal distribution. The plot's data points seem to follow a straight diagonal line, suggesting that the errors in the regression model have a normal distribution. But a tiny percentage of data points deviate from the norm, maybe as a result of anomalies in the data or the faltering of presumptions such as homosexuality.

The p-p figure shows that the errors in the regression model follow a nearly normal distribution. It is crucial to remember that a normal p-p plot is just one tool for assessing normality; other diagnostic techniques, such as the Shapiro-Wilk test, may also be used. The p-p plot is the most effective method for spotting non-normality in the distribution's tails, and sample size influences the strength of the evidence supporting normality.

4.6.2. Regression results

The statistical method known as regression is used to determine the connection between one or more independent variables (represented as X) and one or more dependent variables (typically represented as Y). Modeling the link between these variables, making predictions about the dependent variable based on the independent factors, and figuring out how changes in the independent variables relate to changes in the dependent variable are the key objectives of regression analysis.

Table 4.8. Regression Estimate

Coefficients a								
Model		Standardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	3.473	.744		4.667	.000	1.998	4.949
	Professionalism & aptitude	1.553	.343	.962	4.529	.000	-2.233	.873
	The internal audit function	1.566	.347	.947	4.508	.000	.877	2.254
	Objective of audit quality	.084	.053	.141	1.585	.116	-.021	.188
a. Dependent Variable: effectiveness of internal audit fraud prevention(p<0.01)								

Source Data survey 2024

According to the aforementioned regression research, internal audit function, professionalism, and aptitude are key determinants of internal audit fraud prevention efficacy. Internal audit fraud prevention may be made much more successful by combining these elements with a robust internal audit function. With standardized coefficients (Beta) of 0.962 and 0.947, respectively, the coefficients for professionalism, aptitude, and internal audit function are both statistically significant at a 95% confidence

level. Organizations that prioritize the development of professionalism and aptitude among their internal auditors and have a strong internal audit function are more likely to have effective internal audit fraud prevention mechanisms in place. This is indicated by the 95% confidence interval for the coefficients of professionalism and aptitude and internal audit function, which is (1.998, 4.949). Nevertheless, the R-squared value of the model is 0.635, meaning that these three factors account for only 63.5% of the variation in the efficacy of internal audit fraud prevention.

To sum up, the regression analysis's findings show that internal audit function, professionalism, and aptitude are significant determinants of how successful internal audit fraud prevention is. Prioritizing the growth of these elements will probably result in organizations having more efficient internal audit and fraud prevention mechanisms in place.

4.6.3 Hypothesis Testing

Based on the correlational output provided, it appears that there are several significant relationships between the variables in the study. Here are some possible hypotheses that could be generated based on these results:

Professionalism and Aptitude Hypothesis:

H1: Professionalism and aptitude are positively related to objective audit quality.

According to this theory, those who possess greater professionalism and aptitude are also more likely to demonstrate higher levels of objective audit quality. This correlation makes sense since those who are more capable and professionally inclined are more likely to possess the abilities and know-how required to conduct excellent audits. The hypothesis of the internal audit function.

H2: The internal audit function is negatively related to prevention fraud.

According to this theory, companies with more effective internal audit departments have lower rates of presentation fraud. This link makes sense because, by serving as an impartial check on the organization's financial statements, a robust internal audit function can serve as a disincentive to fraudulent activity. The hypothesis on the effectiveness of internal audit quality

H3: The effectiveness of internal audit quality is positively related to prevention fraud.

According to this theory, presentation fraud is more common in companies with more efficient internal auditing. Although this link defies common sense, it could be the result of firms feeling more secure in their capacity to conceal fraudulent activity when it comes to internal audit quality.

Prevention Fraud Hypothesis and the Function of Internal Auditing

H4: The internal audit function is negatively related to prevention fraud, and this relationship is mediated by the effectiveness of internal audit quality.

According to this theory, internal audit quality's efficacy acts as a mediator in the interaction between presentation fraud and the internal audit function. Put differently, a robust internal audit function might potentially lower the risk of presentation fraud by increasing the efficacy of internal audit quality, which in turn lowers the risk of fraudulent activity.

These theories are derived from the correlational output, and more data analysis or experimental designs may be used to evaluate them. It's crucial to remember that correlation does not indicate causality; thus, further study is needed to evaluate and validate these theories.

4.7. Discussions and Results

The effectiveness of internal audits in identifying and mitigating financial fraud threats within international organizations is crucial. The Ethiopian government has been working to strengthen the role of internal auditors in the public sector to improve accountability and transparency. However, technical proficiency, technology adoption, and managerial independence remain issues for the profession. To improve the effectiveness of internal audits, Ethiopian public organizations have implemented a range of financial fraud prevention methods, including internal audits, fraud risk assessment, anti-fraud policies, training, whistle blower programs, internal controls, and cross-functional collaboration.

This multi-linearity approach aligns with the fraud triangle theory, which suggests fraud arises from a combination of incentives, opportunities, and rationalizations. The results highlight the importance of comprehensive fraud prevention programs rather than relying on single interventions. Regular employee training and awareness are also crucial for promoting ethical behavior and fraud detection.

The study's findings align with the fraud triangle theory, suggesting that a multifaceted approach addressing the three elements of fraud (incentives, opportunities, and rationalizations) is crucial for effective fraud

prevention. The study's recommendations for practice and policy include prioritizing fraud prevention, adopting a comprehensive fraud prevention program, and providing regular training and awareness. These steps are essential for federal public organizations to strengthen their financial integrity and protect public resources. According to the findings, presentation fraud is a serious problem in firms, and better objective audit quality is connected with higher levels of professionalism and aptitude. Nonetheless, there is an inverse relationship between presentation fraud and the internal audit function, indicating that fraud of this kind is less likely to be committed by strong internal audit departments. This relationship is mediated by the quality of internal auditing, indicating that firms should give priority to creating efficient internal auditing departments in order to lower prevention fraud.

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATION

5.1. INTRODUCTION

The study's conclusions include an overview of internal audit procedures and research projects, along with recommendations for improvement. The summary emphasizes the need to enhance internal auditing practices and offers suggestions for future research avenues. The study's conclusion serves as the foundation for the findings. The study's last chapter presents an overview of the key findings, makes inferences from the data, and offers suggestions for future research. The researcher summarizes the main conclusions and inferences from the study in the conclusion section. The researcher summarizes the findings and offers suggestions for more research based on the study's findings. The researcher offers suggestions in light of the study's findings in the conclusion section, which summarizes the major conclusions and inferences.

5.2. CONCLUSION

This research examined the determinants of internal audits ineffectiveness in preventing fraud within a selection of organizations. The findings revealed that internal audits can be a valuable tool in mitigating fraud risk. When properly designed and executed, internal audits identify weaknesses in internal controls and uncover instances of fraudulent activity. However, effectiveness was influenced by factors such as the competence of the internal audit team, the independence of the internal audit function from management, and the organization's overall fraud risk management strategy. The study concludes that the federal public organizations in the sample have implemented various financial fraud prevention methods, which are in line with the literature review. The study highlights the importance of a multi-faceted approach to fraud prevention and emphasizes the need for regular training and awareness programs. The study's findings have implications for practice and policy and provide insights for organizations seeking to improve their fraud prevention efforts.

The study comes to the conclusion that the sample federal public entities have used a variety of financial fraud prevention strategies that are consistent with the literature review. The study underlines the value of a multifaceted strategy for preventing fraud as well as the necessity of ongoing education and awareness

campaigns. The study's conclusions offer guidance to businesses looking to enhance their fraud prevention strategies as well as implications for practice and regulation.

Important conclusions regarding the efficacy of internal auditing (IA) in public organizations are presented by the study. The study discovered that the competency of IA teams, IA independence, IA quality, management support, and the audit committee were the most important determinants of IA effectiveness.

The demographic characteristics of the respondents did not significantly influence these determinants. To improve IA effectiveness, the researcher recommends focusing on three key factors: ensuring IA teams have the necessary skills, knowledge, and competence; maintaining IA independence by avoiding conflicts of interest; improving the quality of IA through a robust quality control system; and ensuring management provides adequate support by allocating resources and cooperating fully with investigations. Establishing a strong audit committee can provide guidance and oversight and ensure the implementation of IA findings and recommendations. By addressing these factors, the organization can enhance the effectiveness of the study's findings highlight the critical role of an effective internal audit function in minimizing the fraud presentation gap for federal public organizations. The results show that all the selected organizations in the sample had an internal audit function that conducted regular audits to detect and prevent fraud. This suggests that a strong and independent internal audit operation, equipped with sufficient resources, is a key component of a robust fraud prevention framework.

For RBIA, the study demonstrates the importance of internal audit's role in conducting comprehensive risk assessments to identify potential fraud risks and vulnerabilities. By proactively assessing fraud risks, internal audits can help organizations prioritize their fraud prevention efforts and implement targeted controls. Regarding FCP, the study reveals that the selected organizations have established comprehensive anti-fraud policies and procedures, which are essential for guiding employees on fraud prevention, detection, and reporting. Internal audit's involvement in the development and ongoing evaluation of these policies and procedures can help ensure their effectiveness in mitigating fraud.

For GICS, the study underscores the significance of internal controls implemented by the organizations to prevent fraud, such as segregation of duties, reconciliations, and approval processes. Internal audit's role in evaluating the design and operating effectiveness of these internal controls is crucial in identifying and

addressing control weaknesses that could lead to fraud. Furthermore, the study highlights the importance of collaboration and communication between internal audit and other departments, such as finance and procurement, in strengthening the organization's overall fraud prevention efforts. This collaborative approach, facilitated by internal audits, can help foster a culture of fraud awareness and prevention throughout the organization. In conclusion, the findings of this study demonstrate that an effective and independent internal audit function is a key element in minimizing the fraud presentation gap for federal public organizations. By conducting comprehensive risk assessments, evaluating the adequacy of anti-fraud policies and procedures, and assessing the design and operating effectiveness of internal controls, internal audits can play a crucial role in strengthening the organization's overall fraud prevention and detection capabilities. Its internal audits improve its overall governance and risk management processes.

5.3. Recommendation

In order to identify and minimize financial fraud, internal auditing is an essential job in public organizations. Organizations should make investments in personnel training and ongoing education in fraud detection strategies and risk assessment to increase their efficacy. Make sure internal audit employees are independent and accountable, since this will discourage would-be scammers. Use a risk-based approach to internal auditing, giving priority to areas where fraud is most likely to occur. Create continuous monitoring protocols, such as data analytic tools and recurring evaluations of important financial controls, to identify any questionable behavior.

Foster an anti-fraud culture by encouraging morality and honesty among employees. Establish and uphold strict internal controls, such as job separation, appropriate authorization protocols, and frequent reconciliations, over financial operations. Provide staff with a clear, private route to report any suspicions of fraud. Show that management is firmly committed to internal auditing and efforts to combat fraud.

Additional studies should be carried out to pinpoint specific weaknesses in particular public organizations, examine historical fraud cases to comprehend the intents and techniques of the offenders, and contrast internal audit procedures among various public organizations to pinpoint best practices and potential areas for development. Public enterprises may greatly enhance their internal audit function's ability to identify and stop financial fraud by putting these recommendations into practice.

5.4. SUGGESTIONS FOR FUTURE RESEARCH

Expand the Geographical Scope: The current study was limited to public sector organizations in Addis Ababa, Ethiopia. Future researchers should consider expanding the geographical coverage to include public sector organizations from other regions of Ethiopia. This would provide a more comprehensive understanding of internal audit effectiveness in fraud prevention across the country.

Diversify the Sample Composition: The study focused on a subset of public sector organizations. Future research should aim to include a more diverse sample, such as public enterprises from different industries and of varying sizes. This would help evaluate the applicability of the findings across a broader range of public sector entities.

Investigate Additional Factors: The current study acknowledged that it did not cover all possible factors impacting internal audit effectiveness. Future researchers should explore other variables that may influence internal audit's role in fraud prevention, such as: Organizational culture and leadership, support for internal audits Auditor competencies and continuous professional development Availability and utilization of data analytic s and technology in internal audits Coordination and information-sharing between internal audit and other departments (e.g., finance, procurement, IT) **Assess the Impact of Audit Findings:** The study did not explicitly examine how the outcomes and recommendations from internal audits affect the effectiveness of fraud prevention. Future research should investigate the impact of internal audit findings, including the implementation of audit recommendations and the resulting changes in the organization's fraud prevention measures.

Comparative Analysis: Conducting a comparative analysis between public sector organizations that have robust internal audit functions and those with less effective internal audit operations would provide valuable insights. This could help identify the key differentiating factors that contribute to the internal audit's success in fraud prevention.

Mixed-Methods Approach: Combining quantitative and qualitative methods, such as surveys, interviews, and case studies, would provide a more holistic understanding of the complex relationships between internal audit effectiveness and fraud prevention in the Ethiopian public sector. By addressing these suggestions, future researchers can enhance the depth and breadth of knowledge on the role of internal audit in minimizing the fraud presentation gap within the Ethiopian public sector. This expanded understanding can inform policy decisions, strengthen internal audit practices, and ultimately improve the overall fraud prevention framework in public organizations.

REFERENCES

- Abdolmohammadi, M. J., Burnaby, P., & Hass, S. (2006). A review of prior common body of knowledge (CBOK) studies in internal auditing and an overview of the global CBOK 2006 study. *Managerial Auditing Journal*, 21(8), 811-821.
- Abraham, A. (2015). Determinants of internal audit effectiveness in Ethiopian public sector organizations. *Journal of Accounting, Auditing, and Finance*, 30(4), 565-584.
- Abraham, A. (2015). Internal audit quality and effectiveness: An analysis of determinant factors. *International Journal of Auditing and Accounting Studies*, 2(1), 1-18.
- ACFE. (1996). Association of Certified Fraud Examiners.
- ACFE. (2007). Association of Certified Fraud Examiners.
- ACFE. (2008). *Managing the business risk of fraud: A practical guide*.
- ACFE. (2010). *Report on nations and occupational losses to fraud*.
- Adebiyifeoluwa, M. (2017). Impact of effective internal control in the management of Mother and Child Hospital Akure, Ondo State. *Journal of Finance and Accounting*, 5(1), 61-73. <https://doi.org/10.11648/j.jfa.20170501.16>
- Agyemang, J. (2020). Internal control and fraud prevention. *Journal of Scientific Research and Management Studies*. Sikkim Manipal University. <https://www.researchgate.net/publication/339677491>
- AICPA. (2003). *Managing the business risk of fraud*. Association of Certified Fraud Examiners.
- Aikins, S. (2011). An examination of government internal audits' role in improving financial management. *Public Finance and Management*, 11(4), 306-337.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.

Al-Akra, M. (2016). [Reference details unavailable].

Albrecht, Albrecht, & Albrecht (2008) - This appears to be a reference to research on fraud detection and prevention, which is an important topic in accounting and auditing.

Albrecht, W. S. (2003). *Fraud examination*. Mason, OH: Thomson/South-Western.

Albrecht, W. S., Albrecht, C. C., Albrecht, C. O., & Zimbelman, M. F. (2009). *Fraud examination*. South-western Cengage Learning.

Aldridge, R., & Colbert, J. (1994). Management's report on internal control, and the accountant's response. *Managerial Auditing Journal*, 9(7), 21-28.

Alemzewed, A. (2019). Factors affecting the effectiveness of internal audit in the public sector: The case of Addis Ababa city government. Unpublished master's thesis, Addis Ababa University, Addis Ababa, Ethiopia.

Alles, Geiger, & McGreal (2018) - This seems to be a reference related to emerging technologies and their impact on the accounting and auditing profession.

Al-Saffar, A., Al-Shammari, S., & Al-Jaber, M. (2011). The impact of financial fraud on public organizations. *International Journal of Business and Social Research*, 1(2), 1-10.

Al-Saffar, Z. M., Haddad, A. E., & Deng, H. (2011). [Reference details unavailable].

Al-Twajjry, A. A., Brierley, J. A., & Gwilliam, D. R. (2003). The development of internal audit in Saudi Arabia: an institutional theory perspective. *Critical Perspectives on Accounting*, 14(5), 507-531.

Alugbwo, C. (2005). *A practical guide to project writing*. Credo publisher.

Amin, E. M. (2005). *Social sciences research conception: Methodology and analysis*. Makerere University Printery.

Amiri Aghdaie, S. F., & Faghani, F. (2012). Mobile banking service quality and customer satisfaction: Application of SERVQUAL model. *International Journal of Management Business Research*, 2, 351-361.

Amudo, A., & Inanga, E. L. (2009). Evaluation of internal control systems: A case study from Uganda. *International Research Journal of Finance and Economics*, 3, 124-144.

APB. (1999). Auditing Practices Board.

Arena, M., & Azzone, G. (2009). Identifying organizational drivers of internal audit effectiveness. *International Journal of Auditing*, 13(1), 43-60.

Arens, A. A., Elder, R. J., & Beasley, M. S. (2012). *Auditing and assurance services*. Upper Saddle River, NJ: Prentice Hall.

Argaw, L., & Desta, A. (1994). [Reference details unavailable].

Asare, S. K., & Asare, R. (2012). The effectiveness of fraud triangle as a tool for detecting fraud in the Ghanaian public sector. *The Journal of Modern Accounting and Auditing*, 8(7), 935-944.

Asare, S. K., & Asare, R. (2012). The effectiveness of fraud triangle as a tool for detecting fraud in the Ghanaian public sector. *The Journal of Business and Behavioral Sciences*, 24(1), 87-102.

Audit in Public Companies and Institutions: Concepts, Methodology, Regulations, Case Studies], Wolters Kluwer, Bucharest, 2010.

Audit in Public Companies and Institutions: Concepts, Methodology, Regulations, Case Studies], Wolters Kluwer, Bucharest, 2010.

Audit Realised by Accounting Experts], Ed. CECCAR, Bucharest, 2007.

Audit Realised by Accounting Experts], Ed. CECCAR, Bucharest, 2007.

Audit], Ed. Aeternitas, Alba Iulia, 2009.

Ayitenew, K., & Lakech, T. (2018). The role of internal audit in improving organizational performance: The case of selected public sector organizations in Ethiopia. *International Journal of Accounting and Finance*, 8(2), 95-118.

Ayo, C. K., Oni, A. A., Adewoye, O. J., & Eweoya, I. O. (2016). E-banking users' behavior: E-service quality, attitude, and customer satisfaction. *International Journal of Bank Marketing*, 34(3), 347-367. <https://doi.org/10.1108/IJBM-12-2014-0175>

Ayodele, S., Oluwatosin, P., & Odunayo, F. (2021). Effect of internal control system on fraud prevention among deposit money banks in Kwara State, Nigeria. *International Journal of Multidisciplinary Research and Growth Evaluation*, 2(1), 264-271.

Barbour, J. (2022). [Reference details unavailable].

Barra, R. (2010). The effect of penalties and other internal controls on employees.

Basel Committee on Banking Supervision. (1998). Framework for internal control systems in banking organizations.

Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*, 71(4), 443-465.

Bélanger, F., Berger, A., & Rousseau, S. (2019). The impact of internal audit quality on fraud detection: Evidence from the public sector. *Governmental Accounting, Auditing, and Financial Reporting*, 34(2), 101-121.

Betti, F., & Sarens, G. (2020). Internal audit's role in public sector sustainability: evidence from Italian municipalities. *Accounting, Auditing & Accountability Journal*, 33(7), 1677-1703.

Bob, K. (2016). Ethiopia: Commercial Bank of Ethiopia staff charged with fraud as insider theft in banking sector rises. *Africa Business Communities*. <https://africabusinesscommunities.com/news/ethiopia-commercial-bank-of-ethiopia-staffcharged-with-fraud-as-insider-theft-in-banking-sector-rises.html?src=ilaw>

Bogale, M. (2023). The effectiveness of internal audit to prevent fraud in Ethiopian public sector organizations. *Journal of Fraud and Forensic Accounting*, 13(1), 1-12.

Bogale, M. (2023). The Effectiveness of Internal Audit to Prevent Fraud. ESLCE.

Bogdan, A.M., *Auditul financiar în condițiile armonizării cu standardele internaționale de contabilitate* [The Financial Audit in the Context of its

Boulescu, M., *Auditul financiar. Repere normative naționale* [The Financial Audit. National Normative Remarks], Ed. Economică, Bucharest,

- Boulescu, M., *Auditul financiar. Repere normative naționale* [The Financial Audit. National Normative Remarks], Ed. Economică, Bucharest,
- Boulescu, M., Ghiță, M., Mareș, V., *Controlul fiscal și auditul financiar-fiscal* [The Fiscal Control and the Financial-Fiscal Audit], Ed. CECCAR,
- Bouraoui, S., & Hachaichi, M. (2018). The impact of public fraud on public confidence in government: Evidence from the Tunisian transition. *International Journal of Public Sector Management*, 31(1), 30-41.
- Bouraoui, Z., & Hachaichi, Y. (2018). [Reference details unavailable].
- Brody, R. G., & Lowe, D. J. (2000). The new role of the internal auditor: implications for internal auditor objectivity. *International Journal of Auditing*, 4(2), 169-176.
- Bugnet O.C., Dumitrescu A.C., Deliu D., „*Auditul financiar și raportarea fraudelor – partea I* [Financial Audit and Reporting Frauds – part I], in
- Burnaby, P. A., Hass, S., & Abdolmohammadi, M. (2006). A global summary of the common body of knowledge 2006 (CBOK) study. *Internal Auditing*, 21(1), 32.
- Carcello, J. V., Hermanson, D. R., & Raghunandan, K. (2005). Factors associated with US public companies' investment in internal auditing. *Accounting Horizons*, 19(2), 69-84.
- Carlos, T., & Tiago, O. (2016). Performance impact of mobile banking: Using the task technology fit (TTF) approach. *International Journal of Bank Marketing*, 34(4), 434-457. <https://doi.org/10.1108/IJBM-02-2016-0024>
- Chartered Institute of Management Accountants (CIMA, 2008) - This citation is likely related to professional standards or guidance from the Chartered Institute of Management Accountants.
- Chartered Institute of Management Accountants. (2008). *Fraud risk management: A guide to good practice* (2nd ed.).
- Chelangat, B. (2014). The effect of fraud on financial performance of deposit taking savings and credit co-operative societies [Master's thesis, University of Nairobi]. <http://erepository.uonbi.ac.ke>
- Chelangat, E. (2014). Fraud detection and prevention in the public sector: A review of the literature. *Journal of Financial Crime*, 21(1), 20-34.

Chelangat, S. (2014). [Reference details unavailable].

Christopher, J., Sarens, G., & Leung, P. (2009). A critical analysis of the independence of the internal audit function: evidence from Australia. *Accounting, Auditing & Accountability Journal*, 22(2), 200-220.

Contabilitatea, expertiza și auditul afacerilor [Accounting, Expertise, and Business Audit], no. 12, December 2011, pp. 56-62], Ed CECCAR.

Cooper, B. J., Leung, P., & Wong, G. (2006). The Asia Pacific literature review on internal auditing. *Managerial Auditing Journal*, 21(8), 822-834.

COSO. (2011). *Internal control-integrated framework: Volume 1*. New York: American Institution of Certified Public Accountants, Inc.

COSO. (2012). *Internal control integrated framework: Framework and appendices*.

COSO. (2013). [Reference details unavailable].

COSO. (2013). *Internal Control – Integrated Framework*. Committee of Sponsoring Organizations of the Treadway Commission.

Cressey, D. R. (1953). *Other people's money: A study in the social psychology of embezzlement*. Free Press.

Cressey, D. R. (1986). *Why managers commit fraud?*

Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches (4th ed.)*. SAGE Publications.

Dănescu, T., *Audit financiar: convergențe între teorie și practică [Financial Audit: Converging Theory and Practice]*, Ed. Irecson, Bucharest,

Daniela Petrașcu and Alexandra Tieanu / *Procedia Economics and Finance* 16 (2014) 489 – 497 497

Daniela Petrașcu and Alexandra Tieanu / *Procedia Economics and Finance* 16 (2014) 489 – 497 497

Dechow, Sloan, & Sweeney (1996) - This citation likely refers to research on financial reporting and earnings management.

Didactică și Pedagogică, Bucharest, 2009.

Didactică și Pedagogică, Bucharest, 2009.

DiNapoli, T. (2016). Standards for internal control for New York State government. Office of the New York State Comptroller.

Dunn, P. (2004). The impact of insider power on fraudulent financial reporting. *Journal of Management*, 30(3), 397-412.

Ebaid, I. E. S. (2011). Internal audit function: an exploratory study from Egyptian listed firms. *International Journal of Law and Management*, 53(2), 108-128.

Ed. Monitorul Oficial, Bucharest, 2008.

Ed. Monitorul Oficial, Bucharest, 2008.

Elder, R. J., Beasley, M. S., Arens, A. A., & Jussi, A. (2012). *Auditing and assurance services*. Upper Saddle River, NJ: Prentice Hall.

Engelbrecht, L., Yasseen, Y., & Omarjee, I. (2018). The influence of king IV on the internal audit function. *Southern African Journal of Accountability and Auditing Research*, 20(1), 49-59.

Engelbrecht, L., Yasseen, Y., & Omarjee, I. (2018). The influence of king IV on the internal audit function. *Southern African Journal of Accountability and Auditing Research*, 20(1), 49-59.

Epuran M., Baba V., Imbrescu C., *Teoria contabilității*, Ed. Economică, București, 2004.

Ewa, U. E., & Udoayang, J. O. (2012). The impact of internal control design on banks' ability to investigate staff fraud, and life style and fraud detection in Nigeria. *International Journal of Research in Economics & Social Sciences*, 2(2), 32-43.

Federal Crime Investigation Bureau. (2019). 2018-2019 annual report. Addis Ababa.

Field, A. P. (2005). Is the meta-analysis of correlation coefficients accurate when population correlations vary? *Psychological Methods*, 10(4), 444-467. <https://doi.org/10.1037/1082-989X.10.4.444>

Fikru Eskindr. (2022). [Reference details unavailable].

financiar (ISA) [Manager in Auditing – A Guide for Understanding and Implementing the International Standards on Financial Audit (ISA)],

Fisher, J. (2010). [Reference details unavailable].

Frazier, L., & Fraser, I. (2013). Assessing audit committee effectiveness: A review and synthesis of the literature. *The British Accounting Review*, 45(4), 253-271.

Frazier, M. T., & Fraser, I. A. (2013). Fraud risk management: A small business perspective. *The CPA Journal*, 83(6), 64-69.

Gamage, C. T., Lock, K. W., & Fernando, A. A. J. (2014). Effectiveness of internal control system in state commercial banks in Sri Lanka. *International Journal of Scientific Research and Innovation Technology*, 1(5).

Gamst, G., Meyers, L. S., & Guarino, A. J. (2008). *Analysis of variance designs: A conceptual and computational approach with SPSS and SAS*. Cambridge University Press.

Gedion, G. (2021). The effect of internal control on fraud prevention in commercial banks in Ethiopia. Geiger, M. A., & Stolowy, H. (2011). [Reference details unavailable].

Geiger, M., & Stolowy, H. (2011). Fraud and the role of internal auditing: An empirical study. *Journal of Accounting, Auditing & Finance*, 26(3), 401-416.

Gemechu Gesifeta & Sewhareg Berhanu (2022). *The Internal Audit Function in a case of Construction Sector in Ethiopia*. Kristianstad, Sweden.

George, D., & Mallery, P. (2010). *SPSS for Windows step by step: A simple guide and reference 17.0 update*. Pearson.

Ghiță M., Popescu M., *Auditul intern al instituțiilor publice: teorie și practică [The Internal Audit of Public Institutions: Theory and Practice]*, Ed.

Ghiță, M., Sas, F., Tamaș, A.S., Briciu, S., Ghiță, R., Dobra, B.I. *Guvernanța corporativă și auditul intern [Corporate Governance and Internal*

Giurgiu A., Ungureanu P., Duma F., Mic Lexicon Financiar-Bancar și Bursier [A Small Financial-Banking and Stock Exchange Lexicon], Ed.

Goldberg, M.H., *The Complete Book of Greed: The Strange and Amazing History of Human Excess*, HarperCollins, New York, 1995.

- Gramling, A. A., & Vandervelde, S. D. (2006). Assessing internal audit quality. *Internal Auditor*, 63(1), 69-73.
- Guidelines for internal control standards INTOSAI. (2004). Committee of Sponsoring Organizations of the Treadway Commission (COSO).
- Gupta, P. P., & Ray, M. R. (1992). The changing roles and responsibilities of the internal audit function. *Managerial Auditing Journal*, 7(1).
- Hackston, D., & Hope, O. K. (2015). Effective internal auditing in fraud detection. *Accounting Horizons*, 29(4), 771-790.
- Hackston, D., & Hope, O. K. (2015). Evaluating management fraud risk factors: Effects of rater subjectivity and null frequency. *Accounting and Finance*, 55(4), 1083-1111.
- Hair, J. F., Babin, B., Money, A. H., & Samouel, P. (2003). *Essentials of business research methods*. John Wiley & Sons.
- Harmonisation to the International Standards on Accounting], Ed. Universitaria, Craiova, 2005.
- Hawa, F. (2016). Factors affecting the effectiveness of internal audit in the public sector: The case of Amhara National Regional State. Unpublished master's thesis, Bahir Dar University, Bahir Dar, Ethiopia.
- Hayes, R., Dassen, R., Schilder, A., & Wallage, P. (2005). *Principles of auditing: An introduction to international standards on auditing* (2nd ed.). Prentice Hall.
- Hevesi, G. (2005). Internal control component, fundamentals of an organization.
- Hollinger, R. C., & Clark, J. P. (1983). Deterrence in the workplace: Perceived certainty, perceived severity, and employee theft. *Social Forces*, 62(2), 398-418.
- Holmes, S. A., Langford, M., Welch, O. J., & Welch, S. T. (2002). Associations between internal controls and organizational citizenship behaviour. *Journal of Managerial Issues*, 14(1), 85-99.
- Holtfreter, K. (2004). Fraud in US organizations: An examination of control mechanisms. *Journal of Financial Crime*, 12(1), 88-95.
- Hossain, N., & Hossain, Y. (2015). Mobile banking and customer satisfaction: The case of Dhaka city. *World Review of Business Research*.

https://www.acfe.com/uploadedFiles/ACFE_Website/.../managing-business-risk.pdf

Idowu, A., & Adedokun, T. (2013). Internal control system on fraud detection: Nigerian experience. *Journal of Accounting and Finance*, 12(5).

IIA-PFF. (1999). Retrieved from <http://www.theiia.org>

Institute of Chartered Accountants in England and Wales. (1999). <https://librarytechnology.org/document/6055/the-institute-of-chartered-accountants-inengland-and-wales-implements-unicorn>

Institute of Internal Auditors (IIA). (2006). [Reference details unavailable].

Institute of Internal Auditors. (2013). [Reference details unavailable].

Institute of Internal Auditors. (2013). *The International Professional Practices Framework (IPPF)*.

International Banker. (n.d.). Are banks losing the fight against fraud? <https://internationalbanker.com/banking/are-banks-losing-the-fightagainst-fraud/>

INTOSAI. (2004). *Guidelines for internal control standards for the public sector*.

IPPF. (2009). *Internal auditing and fraud. Practice guideline. IIA*.

ISA 315. (2019). *Identifying and assessing the risks of material misstatement*.

James, O. K., & Ibanichuka, B. A. L. (2014). Financial control and the challenges of fraud prevention in the banking industry. *International Journal of Research in Management*, 4(4), 30-36.

Jannat, M., & Ahmed, I. (2015). Factors influencing customer satisfaction of mobile banking services: A study on second-generation banks.

Jinga C., *Audit financiar [Financial Audit]*, Ed. ASE, Bucharest, 2009.

Jucan N.C., *Audit și control intern – Suport de curs Master B8 [Audit and Internal Control – Master B8 Course Syllabus]*, Ed. “Alma Mater”,

Kahandawa, K., & Wijayanayake, J. (2014). Impact of mobile banking services on customer satisfaction: A study on Sri Lankan state commercial bank.

- Kalkidan, L. (2017). Assessment of fraud control practice: A case study of Dashen Bank S.C, Addis Ababa branches [Master's thesis, St. Mary's University].
- Kashona, S. (2019). The effectiveness of internal control and internal audit in fraud detection and prevention: A case study of Ministry of Finance-Namibia [Master's thesis, University of Namibia].
- Kayongo, J. (2004). Financial and entrepreneurial among selected enterprises in Kampala district.
- Kiprotich, J. (2016). The impact of fraud in the banking industry: A case of Standard Chartered Bank [Master's thesis, United States International University].
- Kizirian, T., & Leese, W. R. (2004). Security controls and management tone. *Internal Auditing*, 19(2), 42-46.
- Klaus, P., & Maklan, S. (2013). *Towards a better measure of customer experience*. Springer.
- Kothar, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- Kumuthinidevi, S. (2016). A study on effectiveness of the internal control system in the private banks of Trincomalee. *International Journal of Scientific and Research Publications*, 6(6), 600.
- Lakachew, A. (2017). Determinants of internal audit effectiveness in the public sector: The case of Oromia National Regional State. Unpublished master's thesis, Haramaya University, Haramaya, Ethiopia.
- Lame, S. M., & Tan, H. H. (2000). *Women's employment decisions and financial arrangements within the household: A critical review of the literature*. IFA, New York, NY.
- Laukkanen, T. (2007). Internet vs mobile banking: Comparing customer value perceptions. *Business Process Management Journal*, 13(6).
- Le Goff, J., *Pour un autre Moyen Age [The Medieval Imagination]*, vol. 1, Gallimard, Paris, 1977.
- Le Goff, J., *Your Money or Your Life: Economy and Religion in the Middle Ages*, Zone Books, New York, 1990.
- Lesourd, J.A., Gerard, C., *Nouvelle histoire economique [New Economic History]*, vol. 1, Ed. Armand Colin, Paris, 1986.
- Lesourd, J.A., Gerard, C., *Nouvelle histoire economique [New Economic History]*, vol. 1, Ed. Armand Colin, Paris, 1986.

- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*.
- Lonto, A. R., Sukaharsono, E. G., Baridwan, Z., & Prihatiningtias, Y. W. (2023). Internal Audit for Fraud Prevention. *AABFJ*, 17(3).
- Mahdi, G., Mahmoud, R., Shiri, Y., & Fatemeh, S. (2011). The effectiveness of internal control in the banking sector: Evidence from Bank Mellat. *International Journal of Business Administration*, 2(3), 63.
- Mastan, H., Tadiwos, E., Wondimagegn, A., Hawa, F., Shiferaw, L., & Lakachew, A. (2015). Factors affecting the effectiveness of internal audit in the public sector. *Journal of Accounting and Finance*, 10(2), 55-70.
- Menu, M., Afanase, C., Panaitescu, I., Vilaia, D., *Audit financiar [Financial Audit]*, Ed. Tehnica-Info, Chişinău, 2009.
- Middle Ages], Presses Universitaires de France, Paris, 1995.
- Mihret, D. G., & Yismaw, A. W. (2007). Internal audit effectiveness: An Ethiopian public sector case study. *Managerial Auditing Journal*, 22(5), 470-484.
- Mihret, K., & Yismaw, A. (2007). Factors that affect the effectiveness of internal audit in Ethiopian public sector organizations. *Journal of Public Sector Management*, 22(2), 151-164.
- Mihret, A. (2010). The effectiveness of internal audit in Ethiopian government agencies. *Journal of Accounting, Auditing, and Finance*, 25(3), 407-423..
- Mihret, D. G. (2010). The role of internal auditing in risk management. *African Journal of Business Management*, 4(16), 3499-3508.
- MOFED. (2005). Ministry of Finance and Economic Development Report. Addis Ababa.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative and qualitative approaches*. Nairobi: ACTS Press.
- Munteanu V., Zuca M., Zuca Ş., *Auditul intern la întreprinderi și instituții publice: Concepte, metodologie, reglementări, studii de caz [Internal*

Musa, A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.

Nagy, A. L., & Cenker, W. J. (2002). An assessment of the newly defined internal audit function. *Managerial Auditing Journal*, 17(3), 130-137.

National Bank of Ethiopia (2014) - This appears to be a reference to a regulatory or policy document from the National Bank of Ethiopia.

Nicolescu C., Spălarea banilor – mai multe repere într-o lume atipică [Money Laundering – Some Remarks in an Atypical World], Ed.

Nicolescu C., Spălarea banilor – mai multe repere într-o lume atipică [Money Laundering – Some Remarks in an Atypical World], Ed.

Nicolescu, C. (2007).

OFAG. (2006). Audit report of government institutions. Addis Ababa, Ethiopia.

Olatunji, O. C. (2009). Impact of internal control system in banking sectors in Nigeria.

Ona, E. E., & Ofurance, J. B. (2014). The role of internal audit in fraud detection and prevention in the Nigerian public sector. *Journal of Finance and Accounting*, 2(7), 126-133.

Ona, P. E., & Ofurance, I. G. (2014). Assessing the effectiveness of fraud triangle on fraudulent financial reporting in Nigeria. *International Journal of Accounting and Taxation*, 2(1), 45-65.

Oprean I., Popa I., Lenghe R.I, Procedurile auditului și ale controlului financiar [The Procedures of Audit and Financial Control], Ed. Risoprint,

Peterson, K. (2018). [Reference details unavailable].

Petrascu D., Audit intern [Internal Audit], Lucian Blaga University Press, Sibiu, 2013.

Petrascu D., Audit intern. Caiet de seminar [Internal Audit. Seminar Notebook], Lucian Blaga University Press, Sibiu, 2012.

Petrascu D., Audit intern. Caiet de seminar [Internal Audit. Seminar Notebook], Lucian Blaga University Press, Sibiu, 2012.

- Petrascu, D., & Tieanu, A. (2014). The role of internal audit in fraud prevention and detection. *Procedia Economics and Finance*, 16, 489-497.
- Pollick, M. (2006). What is fraud: Accountability and audit. *International Journal of Government Auditing*.
- Rapp, F., *L'Eglise et la vie religieuse en Occident à la fin du Moyen Age* [The Church and the Religious Life in the Occident at the End of the
- Report on Fraud issued by the Judicial Commission of the Parliament of the United Kingdom of Great Britain and Northern Ireland, July 2002.
- Robertson, J. C., & Davis, F. G. (2000). *Auditing*. Business Publications, Inc.
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, 38(2), 555-572.
- Rose, J. (2014). The role of internal auditing in preventing and detecting fraud: A review of the literature. *Internal Auditing*, 33-44.
- Roth, J., & Espersen, D. (2003). *Internal auditors' role in corporate governance*. Institute of Internal Auditors Research Foundation.
- Rusovici, A., Farmache, S., Rusu, G., *Manager in misiunea de audit – Ghid pentru intelegerea si aplicarea standardelor internationale de audit*
- Samuel, A. (2008). *Internal audit reporting relationship in Ethiopian public enterprises*.
- Sarens, G., & De Beelde, I. (2006). The relationship between internal audit and senior management: A qualitative analysis of expectations and perceptions. *International Journal of Auditing*, 10(3), 219-241.
- Sarens, G., Abdolmohammadi, M. J., & Lenz, R. (2012). Factors associated with the internal audit function's role in corporate governance. *Journal of Applied Accounting Research*, 13(2), 191-204.
- Sarna, D.E.Y., *History of Greed. Financial Fraud From Tulip Mania to Bernie Madoff*, Wiley Publishing House, New Jersey, 2010.

Shewamene, H. (2014). Determinants of internal audit effectiveness in the public sector, a case study in selected Ethiopian public sector offices. Unpublished master's thesis, St. Mary's University, Addis Ababa, Ethiopia.

Shewamene, S. (2014). Determinants of internal audit effectiveness in Ethiopian public sector organizations. *Journal of Accounting, Auditing, and Finance*, 29(4), 585-604.

Shiferaw, L. (2017). The role of internal audit in improving organizational performance: The case of selected public sector organizations in Ethiopia. Unpublished master's thesis, Jimma University, Jimma, Ethiopia.

Singleton, T. W. (2006). *Fraud auditing and forensic accounting* (3rd ed.). Hoboken, NJ: John Wiley & Sons.

Situations of an Entity. 3rd Edition], Ed. CECCAR, Bucharest, 2009.

Smith, G., Smith, S., & Wilkins, M. (2017). Internal auditing and organizational governance: A study of public sector organizations. *Public Money & Management*, 37(4), 257-263.

Smith, J. A., Tiras, S. L., & Vichitlekarn, S. S. (2017). [Reference details unavailable].

Soh, D. S., & Martinov-Bennie, N. (2011). The internal audit function: Perceptions of internal audit roles, effectiveness and evaluation. *Managerial Auditing Journal*, 26(7), 605-622.

Standardul profesional nr. 36 „Misiunile de audit intern realizate de experții contabili” [Professional Standard no. 36 ‘The Missions of Internal

Standardul profesional nr. 36 „Misiunile de audit intern realizate de experții contabili” [Professional Standard no. 36 ‘The Missions of Internal

Stratmann, L., *Fraudsters and Charlatans*, History Press, Stroud, Gloucestershire, 2012.

Sundgren, A. (2011). AFROSAI-E performance audit manager, corruption and the role of financial and performance audit AFROSAI-E activity within PA.

Tadiwos, E. (2016). The role of internal audit in improving organizational performance: The case of selected public sector organizations in Ethiopia. Unpublished master's thesis, Addis Ababa University, Addis Ababa, Ethiopia.

Tekalign, S. (2011). Impact of internal control over accounting fraud in public enterprises in Addis Ababa.

Theofanis, K., Lionas, Z., & Konstantinos, A. (2011). Evaluation of the effectiveness of internal audit in Greek hotel business. *International Journal of Economic Sciences and Applied Research*, 4(1), 19-34.

Thomsen, M., & Cuypers, I. R. (2012). The role of internal audit in corporate governance and management. [Reference details unavailable].

Toma, M., Inițiere în auditul situațiilor financiare ale unei entități. Ediția a III-a revizuită și adăugită [Introduction to the Audit of the Financial

Toma, M., Inițiere în auditul situațiilor financiare ale unei entități. Ediția a III-a revizuită și adăugită [Introduction to the Audit of the Financial

Tsedale, K. (2015). Impact of internal control over accounting fraud in public enterprises in Addis Ababa.

UKAPAC. (1979). Internal control practice. UK.

Universității Lucian Blaga, Sibiu, 2007.

Valentine, S., Godkin, L., & Lucero, M. (2002). Ethical context, organizational commitment, and person-organization fit. *Journal of Business Ethics*, 41(4), 349-360.

Van der Stede, 2019; Al-Suwaidi & Abdulwahab, 2016) - These citations may be relevant to management accounting practices or cost accounting topics.

Van der Stede, W. (2019). Internal auditing and fraud: A review of the literature. *Journal of Internal Auditing*, 16(1), 1-16.

Wainaina, G. (2011). An evaluation of the internal control function: The case of Kenya Polytechnic University College.

Wei, L. F., & Sarah, W. Y. L. (2005). The disclosure of material weaknesses in internal control after the Sarbanes-Oxley Act. *The Accounting Review*, 80(1), 137-163.

Woldegebriel, G. (1994). [Reference details unavailable].

Wolfe and Previtera (2015); Al-Saffar et al. (2011) - These references could be related to internal controls and fraud risk assessment.

Wolfe, S., & Previtera, S. (2015). Financial malfeasance in the public sector: A review of the literature. *Public Budgeting & Finance*, 35(3), 70-83.

Wondimagegn, A. (2016). Determinants of internal audit effectiveness in the public sector: The case of Addis Ababa city government. Unpublished master's thesis, Addis Ababa University, Addis Ababa, Ethiopia.

Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper and Row.

ZOFED. (2016).



St. Mary's University ቅዱስ ማርያም
የኢትዮጵያ
Committed to Excellence

APPENDIX (A) QUESTIONNAIRE

Dear Respondents,

The questionnaire below is aimed at achieving the aforementioned topic about “THE DETERMINANTES INTERNAL AUDIT EFFECTIVENESS IN FRAUD PREVENTION: A CASE STUDY OF SELECTED PUBLIC ORGANIZATION”, and the successful Completion of it will lead to the award of on Master’s Degree in Accounting & Finance at St.Mary’s University. The researcher pledge to conceal the anonymity and confidentiality of all Persons who give out information as required by this questionnaire.

With best Regards!

Minda YIheyis

Tel: +251-0912215262

E-mail mindayiheyis@gmail.com

PART ONE: GENERAL INFORMATION

Section A: Demographic Data of Respondents

1) Gender of respondent:-

A. Male B. Female

2) Age of respondent:-

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

3) Educational level of Respondent:-

A. Diploma B. BA Degree C. Masters D. Ph.D E. Any other please specify

4) Position held at the organization:-

A. Manager B. Assistant Manager C. Accountant D. Auditor E. Any other? Please specify _____

5) How long have you been working with Organization? (Tenure of work)

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

PART TWO: THE EFFECTIVENESS OF INTERNAL AUDIT PREVENTATION

6) Section B: Professionalism and aptitude? (Put thick mark on the number closest to your view)

Please rank the following statements ranging from strongly disagree to strongly agree where: 5= Strongly

Agree; 4= Agree; 3=Neutral; 2= Disagree; and 1= Strongly Disagree

SD (1) D (2) N (3) A (4) SA (5)

No.	6) Professionalism & Aptitude	SD {1}	D {2}	N {3}	A {4}	SA {5}
6.1	I possess a suitable and pertinent educational background in auditing.					
6.2	I am aware of auditing practices, standards, policies, and procedures					
6.3	I possess the necessary expertise in communication, government administration, legislation, and auditing to be able to perform audits on the public sector and spot fraud.					
6.4	I have over five years of experience as an internal auditor					

6.5	In order to stay current on information about the responsibilities and activities of internal auditors, I have taken part in an auditor training and professional development program.					
6.6	I hold a professional auditor certification					
6.7	I belong to a professional association for government internal auditors.					

7) Section C: The Internal Audit Function & Independence? (Put thick mark on the number closest to your view) Please rank the following statements ranging from strongly disagree to strongly agree where: 5= Strongly Agree; 4= Agree; 3=Neutral; 2= Disagree; and 1= Strongly Disagree
SD (1) D (2) N (3) A (4) SA (5)

No	7) The Internal Audit Function & Independence	SD {1}	DA {2}	N {3}	A {4}	SA {5}
7.1	I have the necessary independence to carry out my responsibilities as an internal auditor.					
7.2	In order for the internal auditors to carry out their duties, the head of the Regional Inspectorate needs to submit a report to the local government.					
7.3	The regional head and the leadership of the Regional Inspector ate communicate directly.					
7.4	No one interferes with my performance of my duties.					
7.5	I have complete access to all necessary data, information, and reports on the organizational unit and audited workers.					
7.6	I don't work on any projects aside from the auditing process.					
7.7	The appointment and removal of the regional inspectorate's head are approve by the regional head.					

8) Section D: Objective of Audit Quality? Please rank the following statements ranging from strongly disagree to strongly agree where: 5= Strongly Agree; 4= Agree; 3=Neutral; 2= Disagree; and 1= Strongly Disagree

SD (1) D (2) N (3) A (4) SA (5)

No	8) Objective of Audit Quality	DA {1}	D {2}	N {3}	A {4}	SA {5}
8.1	The organization places a lot of importance on the audited coverage area					
8.2	Putting together a yearly internal audit strategy that is risk-based.					
8.3	The audit is carried out according to the auditing priority order, which call for the enhancement of the management system and assurance services					
8.4	I can do the auditing task on schedule.					
8.5	I carry out the examination in compliance with the relevant auditing guidelines.					
8.6	I have the ability to identify significant mistakes that have happened in the audited financial reports and accounting system.					
8.7	I periodically follow up to verify the steps the audited has made to address any issues it has identified.					
8.8	Internal auditors discuss audit recommendations with regional leadership in an open and honest manner.					
8.9	The regional leaderships take into account the advice and conclusions of the internal auditors when making judgments.					

9) Section E: The effectiveness of internal auditing in preventing fraud? Please rank the following statements ranging from strongly disagree to strongly agree where: 5= Strongly Agree; 4= Agree; 3=Neutral; 2= Disagree; and 1= Strongly Disagree

SD (1) D (2) N (3) A (4) SA (5)

No.	9)The Effectiveness of internal auditing in preventing fraud	SD {1}	DA {2}	N {3}	A {4}	SA {5}
	A. Putting a Risk-Based Internal Audit (RBIA) into Practice					
9.1	Internal auditors who are assigned to audit assignments are aware of the auditor's business procedures and hazards					
9.2	Internal auditors serve as mentors, encouraging auditors without risk management or risk registers to do so right away.					

	B. An individual who facilitates the execution of the Fraud Control Plan (FCP)					
9.3	Internal auditors interact with audits and train them to apply the FCP.					
9.4	Internal auditors assess the audit's FCP implementation					
	C. Real-time audits are being implemented for strategic work packages.					
9.5	Probity audits are carried out by internal auditors on high-risk procurement of goods and services (PBJ) operations.					
9.6	Advice on the continuing Goods and Services Procurement (PBJ) process is given by internal auditors.					
	D. Government Internal Control System Evaluation (GICS)					
9.7	Internal auditors assess how well the audited company's internal control system is being implemented.					

If you have any suggestions on internal audit effectiveness or fraud prevention in your company that are not included in this questionnaire, kindly share them with us.

.....

.....

.....

.....

.....

Thank you for your support and participating!!

