

SAINT MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

Determinants of internal audit effectiveness in Ethiopian selective private banks: the perception of internal auditors.

BY: Remedan Nassir Nuri Alwaysme295@gmail.com SGS/0111/2015A

Nov. 2024

Addis Ababa, Ethiopia

Determinants of internal audit effectiveness in Ethiopian selective private banks: the perception of internal auditors.

Advisor: Zenegnaw Abiy (PHD)

A Thesis submitted to the Department of Accounting and Finance, College of MBA, Saint Mary's University, in Partial Fulfillment of the Requirement for the Master of Science (MSC) Degree in Accounting and Finance.

Nov. 2024 Addis Ababa, Ethiopia

ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

FACULTY OF BUSINESS

DETERMINANTS OF INTERNAL AUDIT EFFECTIVENESS IN ETHIOPIAN SELECTIVE PRIVATE BANKS: THE PERCEPTION OF INTERNAL AUDITORS.

BY

REMEDAN NASSIR

| APPROVED BY BOARD OF EXANMINERS | Signature |
|---------------------------------|-----------|
| Dean, Graduate Studies | |
| Advisor | |
| External Examiner | |
| Internal Evaminar | |

Statement of declaration

I undersigned the declaration that this research report is my original work and has not been presented for a degree in any other university, and all the materials used for this study have been duly acknowledged.

| Name: Remedan Nassir |
|---------------------------------|
| Signature: |
| Date: |
| Confirmed by Advisor: |
| Name: Zenegnaw Abiy Hailu (PHD) |
| Signature: |
| Date: |

ENDORSEMENT

| This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a university advisor. | | |
|---|-----------|--|
| | | |
| | | |
| | | |
| Zenegnaw Abiy Hailu (PhD) | | |
| Advisor | Signature | |

Nov. 2024

Addis Ababa, Ethiopia

Acknowledgement

I want to start by giving thanks to almighty Allah for helping me to complete this study project and for his unending support throughout my life. Second, I want to sincerely appreciate Dr. Zenegnaw Abiy Hailu (PhD.) for his ongoing feedback and assistance in creating this research paper, as well as for providing me with information that is really helpful for my research.

My achievement is greatly attributed to my friends and coworkers. Thank you so much.

Lastly, I would like to express my gratitude to the employees of the head offices of private commercial banks of internal audit departments. They all spoke their opinions and shared their thoughts with me, and they were all willing to contribute what was required for this study.

ACRONYMS AND ABBREVIATIONS

EPCBs Ethiopian Private commercial banks

ENB Ethiopian national bank

IAF Internal audit function

IPPF International Professional Practice Framework

IAE Internal audit effectiveness

IIA Independence of internal auditing

ITT Information technology tools

CIA Competency of internal auditors

CBB Construction and business bank

CBE Commercial bank of Ethiopia

DBE Development bank of Ethiopia

OS Organization setting

MS Management support

Table content

| Acknowledgement |
|---|
| ACRONYMS AND ABBREVIATIONSii |
| Table contentiii |
| List of tablesvi |
| ABSTRACTvii |
| Chapter 1 |
| 1. Introduction |
| 1.1. Background of study |
| 1.2. Internal audit in Ethiopian private banks |
| 1.3. Statements of problem |
| 1.4. Objectives of study5 |
| 1.4.1. General objective |
| 1.4.2. Specific objectives of study |
| 1.5. Research questions 6 |
| 1.7. Significance of the study |
| 1.8. Scope of study |
| 1.9. Limitation of study |
| 1.10. Organization of the Study |
| Chapter 29 |
| 2. Literature Review |
| 2.1. Theoretical literature review |
| 2.1.1. Internal audit9 |
| 2.1.2. Concept of internal audit effectiveness |
| 2.1.3. Theories of internal audit effectiveness |
| 2.1.4. Determinants of IA effectiveness |
| 2.2. Empirical literature review |
| 2.3. Summary and literature gap |
| 2.4. Conceptual framework |
| Chapter 3 |
| 3 Research Methodology 20 |

| 3.1. Research design | 20 |
|--|----|
| 3.2. Research approach | 21 |
| 3.3. Data source | 22 |
| 3.3.1. Population of study | 22 |
| 3.3.2. Sample size determination | 23 |
| 3.4. Method of analysis | 24 |
| 3.4.1. Model development | 24 |
| 3.4.2. Variable definition | 25 |
| 3.4.3. Model validity | 26 |
| Chapter 4 | 28 |
| 4. Analysis and Discussions | 28 |
| 4.1. Introduction | 28 |
| 4.2. Demographic analysis | 28 |
| 4.3. Reliability analysis | 30 |
| 4.4. Assessment of ordinary least square method | 30 |
| 4.4.1. Assessment of normality test | 30 |
| 4.4.2. Assessment of multicollinearity | 31 |
| 4.5. Regression results | 33 |
| 4.6. Major findings and Discussions | 36 |
| 4.5.1. Independence of internal auditing (IIA) | 36 |
| 4.5.2. Competency of internal auditors (CIA) | 36 |
| 4.5.3. Organization settings (OS) | 37 |
| 4.5.4. Information technology tools (ITT) | 37 |
| 4.5.5. Management support (MS) | 37 |
| Chapter 5 | 38 |
| 5. Major findings, Conclusion and Recommendation | 38 |
| 5.1. Introduction | 38 |
| 5.2. Summary of major findings | 38 |
| 5.3. Conclusion | 39 |
| 5.4. Recommendation | 40 |
| 5.3.1. Future research directions | 41 |
| References | 42 |

| Appendix 1 | 47 |
|------------|----|
| Appendix 2 | 49 |

List of tables

| Table 4 1 Gender descriptive analysis | 28 |
|--|----|
| Table 4 2 Age descriptive analysis | 29 |
| Table 4 3 Experience descriptive analysis | 29 |
| Table 4 4 Education level descriptive analysis | 29 |
| Table 4 5 Reliability Statistics (source SPSS 2024) | 30 |
| Table 4 6 Normality test (source SPSS 2024 data survey) | 31 |
| Table 4 7 Collinearity test (source SPSS 2024 survey data) | 32 |
| Table 4 8 Pearson matrix correlation test (source SPSS 2024 Survey data) | 33 |
| Table 4 9 ANOVA ^a (source SPSS 2024 survey data) | 34 |
| Table 4 10 Model Summary ^b (source SPSS 2024 survey data) | 34 |
| Table 4 11Regression result (source SPSS2024 survey data) | 35 |
| Table 4 12 List of Ethiopian private banks (NBE, 2023) | |

ABSTRACT

There is a lack of mutual understanding regarding the effectiveness of internal auditing, even though it is a crucial part of business management and the cornerstone of organizations' safe and sound operation. This study aims to evaluate the factors that influence internal audit effectiveness in private commercial banks in Ethiopia. The major objective of this study is to investigate determinants of internal audit effectiveness for Ethiopian private commercial banks. After reviewing relevant literature, the researcher decided to use an explanatory study design. Employees of internal auditors at the head offices of private commercial banks were included in the survey-based study, which also included quantitative research methods. The quantitative study approach is predicated on 32 useful questions that were gathered from 157 respondents from selected private banks (established before 2020). Primary data was used to study this research which was collected through questionnaire and the data was analyzed using SPSS software based on the linear regression model. The competency of internal auditors, inexpediency of internal auditors, organizational setting and information technology tools significantly affect internal audit effectiveness on value adding roll, increase department performance and organizational performance. But the other factor management support from the predictors included in this study that, when we look at the results, becomes irrelevant for the effectiveness of internal audit. The study's researcher primarily advised Ethiopian private commercial banks to improve the efficacy of internal audit by focusing on maintaining and strengthening the organization settings, which in turn improves bank performance overall. assuring independency of internal auditors in terms of giving their freedom to do their work independently, also private banks should think about placing competent and adequate staff in their offices as it is essential to the efficient execution of the internal audit function. and having support in using ITT to enhance the efficacy of IA function.

Keywords: effectiveness of internal audit, Ethiopian private commercial banks and internal audit

Chapter 1

1. Introduction

1.1. Background of study

Auditing is a system for impartially getting and assessing prove with respect to claims almost financial acts and occasions, determining the extent of consistency of those claims with built up standards, and communicating the comes about to interested clients. (Bradley, 2005)

Internal auditing is an independent, objective auditing and advisory action pointed at strengthening and progressing the operations of an organization. It helps businesses accomplish their objectives by giving an efficient, restrained approach to evaluating and progressing the adequacy of risk administration, control, and governance processes. Internal audit fulfills this by giving bits of knowledge and suggestions based on investigation and assessment of information and business processes. With a center on integrity and responsibility, internal audit gives value to boards and senior administration as an objective source of independent counsel. Experts called internal auditors are utilized by organizations to perform internal audit exercises (IPPF, 2017).

An internal audit department with adequate specialist, stature, autonomy, assets, and get to the board of executives is essential for banks. Good corporate governance depends on the presence of impartial, competent, and qualified internal auditors. A solid inside control framework, counting a fair and effective internal audit service, is an essential element of strong corporate administration. Administrators who oversee banking operations must be fulfilled with the adequacy of the bank's internal audit department, compliance with arrangements and procedures, and timely and suitable adjustments by management. for any deficiencies in internal control noted by internal auditors. A bank's board of executives, senior administration and banking administrators receive important assurance about the quality of the bank's internal control framework from the internal audit work. Thus, this function makes a difference minimize the risk of misfortune and harm to the bank's reputation (Basel Committee on Banking Supervision, 2012).

Organizations with successful internal audit practices are way better able to recognize business risks, take fitting remedial activity, and eventually back nonstop change. If an internal audit project has organizational independence, formal order (with a confirmed audit charter), unrestricted access, sufficient funding, capable leadership, skilled personnel, an audit committee, stakeholder backing, expert auditing standards, and a limited scope, it can significantly contribute to increasing transparency in financial reporting and corporate governance (Smet, 2011). To accomplish internal audit effectiveness, we must pay consideration to the components that can influence it (Adhista, 2015).

In this way, the practicality of internal audit is crucial to achieve organizational destinations and suitably associations whether private or public must ensure that their internal audit works.

Internal auditors need to expand their scope and become more involved in risk management, control, and governance processes. With these changes, more and more new concepts are emerging, and the added value and effectiveness of internal auditing for organizations is gaining attention. To determine the efficiency and effectiveness of internal auditing, it is becoming increasingly important to find appropriate ways to measure and evaluate the services achieved to ensure added value (Spencer, 2003).

The stability of the banking sector is critical to maintaining trust, which is the basis of a well-functioning economy. Government legislatures and regulators around the world have incorporated the Basel Framework, a set of recommendations developed after the 2007-2009 financial crisis, into their regulation of financial institutions. Internal auditors working in financial services need to understand the international standards and principles for capital adequacy that apply to their jurisdiction (IIA, 2022).

The purpose of this study was to build on variables created by past analysts (Pham, D.C., & Nguyen, 2021, Ahmet, 2021; Mihret, Dessalegn, and Woldeyohannis, (2008)), including administration back, internal auditor recognition of the value of internal audit, organizational autonomy, adequate and capable employees, and existence of an affirmed internal audit standard. The objective was to identify the determinants of internal audit effectiveness in private banks in Ethiopia. This study focused on a selected Ethiopian private bank and attempted to carefully investigate the factors that determine internal audit effectiveness.

1.2. Internal audit in Ethiopian private banks

Ethiopian banking as we know it now began at the conclusion of Emperor Minilik's reign. In 1905, Emperor Minilik II signed a deal with Mr. MacGillivray, the agent of Egypt's National Bank. According to the agreement, the emperor formed the first bank, the Bank of Abyssinia, on February 16, 1906, and placed it completely under the jurisdiction of the National Bank of Egypt. Furthermore, it is a private bank, whose shares were offered in Addis Ababa, New York, Paris, London, and Vienna.

After the 1991 regime change and the 1992 start of the liberalization agenda, many financial institutions were set up to function primarily within a framework of market-oriented policies. The NBE was created as a judicial body apart from the government and its tasks, functions, and expected duties were outlined in the Monetary and Banking Proclamation No. 83 of 1994.

Following the implementation of Proclamation No. 591 of 2008, the NBE experienced a significant reorganization and saw an increase in its regulatory and supervisory functions. Access to finance and

financial inclusion were accelerated by the introduction of new financial products and innovations like digital finance, online banking, and mobile banking. Financial intermediation increased as more banks and MFIs entered the financial sector. The government has also recently made the decision to liberalize the financial sector by permitting foreign investment in the banking industry (NBE, 2023/24).

The formation of private banking and the fortification of the sector has improved throughout the years, and following this year of development, Ethiopia today has around 31 banks, including the oldest state-owned government bank, Commercial Bank of Ethiopia.

The effectiveness of internal audit in Ethiopian private banks is crucial for ensuring the stability, efficiency, and integrity of the banking sector. In recent years, there has been an increased emphasis on internal audit effectiveness in Ethiopian private banks. The government, regulatory bodies, and stakeholders are becoming more aware of the importance of strong internal control systems to ensure financial stability, integrity, and accountability.

The National Bank of Ethiopia, the country's central bank, has issued guidelines and directives to enhance internal audit practices (MFI/31/2020). Banks are now required to establish an Internal Audit Department and comply with defined auditing standards.

Ethiopian private banks are increasingly focused on training their internal audit staff to ensure they possess the necessary knowledge and skills. Training programs and workshops are being conducted to enhance audit techniques, risk assessment, and control evaluation.

Currently, they are also attempting to ensure the independence of their internal audit function. This involves creating reporting lines to the board of directors or audit committee, separating the internal audit function from operational units, and employing skilled and experienced personnel. (NBE, 2023).

1.3. Statements of problem

Internal auditing is critical for improving an organization's operational efficiency and performance. It gives independent and objective assurance about the adequacy and efficacy of internal controls, risk management systems, and governance frameworks. (IPPF, 2017).

There is a concern that the internal audit function is not meeting the expectations of stakeholders, including management, shareholders, regulators, and external auditors in Ethiopian private banks. This lack of effectiveness may result from several factors, including inadequate resources, deficient skillset, inappropriate governance structures, and weak risk management (IPPF, 2017).

External auditors rely on internal auditors to assess the efficiency of internal controls, identify operational inefficiencies, and detect fraudulent activity within the firm. If the internal audit function

is ineffective, external auditors may have difficulty fulfilling their tasks and delivering an opinion on financial statements. External auditors may need to commit more time and resources to compensate for weaknesses in the internal audit function, resulting in higher audit fees, longer audit timelines, and lower audit quality (Smet 2011). As a result, external auditors may have a vested interest in the factors influencing internal audit effectiveness in Ethiopian private banks, as these can affect the quality and reliability of the information on which they base their financial statement opinions. As a result, it is necessary to understand the factors influencing internal audit effectiveness in Ethiopian private banks in order to develop methods for enhancing the practice.

Internal audit must be effective to the extent that it can achieve the objectives of the audit activity (Adhista, 2015). Mihret (2007) explains that the internal audit function is effective when it can achieve its stated objectives. IIA (2010) defined internal audit effectiveness "as the degree (including quality) to which established objectives are achieved." This means internal audit effectiveness is the ability of internal auditor to achieve established objectives within the organization (Greaves, 2017).

Ensuring the efficacy of internal audits in banks is just as vital as it is in other businesses, because having effective internal audit functions leads to a better internal control system and higher organizational performance. A competent Internal Audit Function (IAF) can benefit all stakeholders while also improving corporate governance (Smet and Mention, 2011). Internal auditors can educate line managers on their responsibilities, serve as risk monitoring consultants, discover flaws in internal control systems, and help with risk management implementation. IA also helps to ensure that the audited body's methods and activities are adequate (Cohen and Sayag, 2010; Arena and Azzone, 2009; Dittenhofer, 2001).

Numerous articles have addressed the aspects that influence the success of internal audits. However, the results of other researchers' inquiries into the effects of the components they considered differ. For example, Shewamene (2014) conducted a study on public enterprises in general, including Commercial Bank of Ethiopia (CBE), Development Bank of Ethiopia (DBE), and Construction and Business Bank (CBB), and discovered that management support, the presence of adequate and competent IA staff, and the availability of an approved IA charter all had a significant and positive impact on the effectiveness of internal audits in the public sector. Similarly, Abraham (2015) discovered in his research on the Construction and Business Bank (CBB) that management support, the presence of enough and skilled IA professionals, organizational independence, and management perception all had a substantial impact on internal audit effectiveness. Mihret, Dessalegn Getie, Kieran James, and Joseph M. Mula (2010) claim that management support has a significant influence on internal audit effectiveness; however, Medhait Amare (2016) and Firehiwot Weldu (2017) claim that management support has no appreciable

impact on internal audit effectiveness in their studies. According to a 2016 study conducted by Medhanit Amare, organizational setting has a significant impact on internal audit effectiveness, contradicting the conclusions of (Mihret, 2007), who claim that there is no significant impact with organizational environment. Many scholars consider the organizational independence of internal auditors, backing from higher management, the quality of audit work, and the skill of the internal audit team to be important considerations. However, when we consider the same variables (organizational setting and management support), their conclusions differ. The specific research methodology used in the study distinguishes the results. In this circumstance, utilizing the appropriate technique to analyze the factors of internal audit effectiveness is critical for producing better results.

Therefore, this study is attempted to fill the literature gap using the right methodology to impact on the depth and scope of the findings. Research adopted a qualitative approach, utilizing interviews or surveys with internal auditors to gather their perceptions and experiences. Alternatively, it took a quantitative approach by analyzing available data on internal audit effectiveness and using statistical techniques to identify key determinants.

Auditors play an important role in maintaining strong governance, risk management, and internal control inside an organization. Their perspective of their job and independence can have a considerable impact on how effectively they perform their duties. Internal auditors who believe they are independent of management and free to objectively examine and report on the organization's operations are more likely to provide significant insights and recommendations for change. Internal auditors must preserve objectivity, honesty, and credibility in their work, which requires perception independence. In the context of Ethiopian private banks, where internal audit functions are critical for ensuring financial stability and regulatory compliance, internal auditors' perceptions of their independence can have a direct impact on the effectiveness of internal audit processes and, ultimately, the organization's overall success. So, specimen of the perception of auditors makes the research more valuable than the others for more determining of the issue, as the individuals are directly involved in the internal audit processes and practices can provide valuable insights and experiences.

1.4. Objectives of study

1.4.1. General objective

The main objective of this research is to identify the factors that determine the effectiveness of internal audits in Ethiopian private banks, from the perspective of internal auditors.

1.4.2. Specific objectives of study

- 1. Assessing the independence of internal auditors in Ethiopian private banks.
- 2. Assessing the competence of internal auditors in Ethiopian private banks.
- 3. Assessing the organizational framework of internal auditors in private banks in Ethiopia.
- 4. Assessing the management support for internal auditors in Ethiopian private banks.
- 5. Assessing the information technology tools in Ethiopian private banks.

1.5. Research questions

The research has proposed to answer the following research questions.

- 1. What are the key factors that influence the effectiveness of internal audit functions in Ethiopian private banks, as perceived by internal auditors?
- 2. How does the organizational structure of Ethiopian private banks impact the effectiveness of internal audit functions?
- 3. To what extent does the competency and professional expertise of internal auditors influence the effectiveness of internal audit functions in Ethiopian private banks?
- 4. How does the adoption of technology and audit tools impact the effectiveness of internal audit functions in Ethiopian private banks?

1.6. Research hypothesis

Based on a review of existing literature, including studies by Mihret and Yismaw (2007), Cohen & Sayag (2010), and Arena and Azzone, which explore the relationships between several key factors and internal audit effectiveness, this study proposes the following directional hypotheses. These factors include the level of management support, the independence of internal auditors, the competency of internal auditors, the organization settings, and the information technology tools.

- HI: The independence of internal auditors is positively related to the internal audit effectiveness in Ethiopian private banks.
- H2: The competency of internal auditors is positively related to the internal audit effectiveness in Ethiopian private banks.
- H3: The organizational settings have a positive significance in effectiveness of internal audit in Ethiopian private banks.
- H4: The management support is positively related to the internal audit effectiveness in Ethiopian private banks.
- H5: The information technology tools have significance impact to the internal audit effectiveness.

1.7. Significance of the study

Internal audit is essential to the banking industry's daily operations since it plays a significant part in the nation's social and economic elements. Ethiopian private commercial banks will benefit from a new finding in this area that will help them improve the efficacy of their internal audit. They should use the findings to improve their internal audit function in order to fulfill their role in the efficacy of corporate governance. It also serves as a foundation for upcoming research projects in this field.

1.8. Scope of study

Conceptual scope: The study investigated the characteristics that influence the efficacy of internal auditing in Ethiopia's private banks. The study looked at internal auditors' perceptions on the determinants of internal audit effectiveness and how they relate to the elements that influence it. The study focused on private banks operating in Ethiopia, and the data was obtained via a survey questionnaire distributed to internal auditors at these institutions. The study will provide insights into the factors of internal audit effectiveness in private banks, as well as help identify areas for improvement in internal auditing effectiveness.

The study investigated the factors that influence the effectiveness of internal audits within Ethiopian private banks, specifically from the perspective of internal auditors themselves. Here are some key elements that might be included within the conceptual scope:

Internal Audit Effectiveness: This refers to the extent to which internal audit efforts meet their objectives and contribute to the overall strengthening of financial controls, risk management, and governance in Ethiopian private banks.

The Perspective of Internal Auditors: The study adopts the viewpoint of internal auditors themselves. This means that data collected through interviews captures the perceptions, experiences, and insights of internal auditors about the factors that affect the effectiveness of internal audits.

Geographical scope: The research focused solely on internal audit functions within privately owned banks in Ethiopia which are established before 2020 (shows at appendix below). The study does not extend beyond the borders of Ethiopia or to public or international banks operating in the country.

The scope likely involved conducting the research in geographic locations within Ethiopia where the head offices' private banks are in Addis Ababa.

The study's findings and recommendations tailored to the specific context of Ethiopian private banks and may not be directly applicable to the internal audit functions in public banks, international banks,

or banks operating in other countries. Is limited to private banks operating in Ethiopia. Therefore, the study is specific to the Ethiopian private banking sector only.

1.9. Limitation of study

The primary drawback of the study is that some respondents did not provide the researcher with the time that was anticipated and their response to the question wasn't satisfied due to the researcher being forced to leave some additional determinants (management's perception of IA's value, objectivity of internal auditing and audit committee).

The researcher used convenience sampling strategy since it is easy to implement. Convenience samples often select participants based on their availability or accessibility while, leading to a biased sample that may not accurately represent the target population.

1.10. Organization of the Study

The study has five chapters. Chapter one covers the introduction, problem statement, objectives, hypothesis, significance, and scope. Chapter two reviews theoretical and empirical literature on internal audit effectiveness, ending with a summary of knowledge gaps. Chapter three discusses research methodology and design. Chapter four presents case study findings and analysis. Chapter five summarizes conclusions and provides recommendations, followed by references and appendices.

Chapter 2

2. Literature Review

2.1. Theoretical literature review

2.1.1. Internal audit

An audit of past financial statements has been defined as: "a systematic process of obtaining and evaluating objective evidence regarding assertions about economic actions and events to determine the degree of correspondence between those assertions and established criteria, as well as communicating with interested parties about the end results" (Baltaci, M., & Yilmaz, S. 2006). Auditing, as described by Lawrence and B. Sawyer (1988), is evidence in which the auditor makes a written report giving an opinion on whether the financial statements substantially correspond to frequently accepted argument elements or other recognized criteria.

According to Arens et al. (2012), audits can be grouped into two types based on the primary beneficiaries: external audits and internal audits. External auditors are individuals who do not work for the firm being audited and can provide a prepared report on the financial accounts by determining if the report reflects facts or not. Such auditors are known as "independent" or "external" auditors. External auditors might work for themselves or for an auditing business. External auditors are those who review financial statements for publicly listed firms, governments, private companies, joint ventures, and other entities. This is done once at the end of each fiscal year, unless particular circumstances arise during that period.

The definition of internal auditing differs depending on the literature; however, the overall definition comprises key issues that serve as the foundation for basic internal audit standards. The new Institute of Internal Auditors (IIA, 2001) defines internal auditing as "an independent, objective assurance and consulting activity designed to add value and improve an organization's operations." It assists a company in meeting its goals by implementing a systematic, disciplined approach to evaluating and improving the efficacy of risk management, control, and governance systems."

According to the following definition. The fundamental role of internal audit is to provide independent assurance about an organization's risk management practices. Audits, as a value-added service, must establish a customer base and understand the organization's demands. In this case, the service function must clearly assist the organization, rather than internal audit serving its own inner purposes. The chief audit executive should prioritize value creation and drive the entire audit process. In order to be effective, the chief audit executive and internal auditors must fulfill or surpass certain standards. Given the ever-changing company environment, the efficacy and dependability of internal auditing are crucial.

Internal auditing is a process by which internally selected auditors collect information regarding the effectiveness of a quality system, regardless of the areas, functions, or procedures being audited. The Internal Audit Function, on the other hand, is the mechanism that formally monitors the operation of the quality management system, ensures that this is achieved effectively in accordance with the documented quality system, all in collaboration with management, and supports system organization members in effectively carrying out their governance responsibilities (MoFED, 2004).

To build a solid company organization, IA plays a significant part in its management and operations. Furthermore, before conducting an external audit, the audit is intended to be done by internal audit during the yearly audit, saving time that the external auditor would otherwise have to spend. Furthermore, if there are write-offs and other charges that appear in the financial statements but are not in accordance with government regulations, having an internal auditor in the firm will be effective and result in fewer financial irregularities. Furthermore, external auditors are more inclined to rely on internal auditors' reports (Goodwin and Kent, 2006).

2.1.2. Concept of internal audit effectiveness

Internal audits are critical to an organization's governance and operations. When installed, operated, and managed properly, it is a critical component in assisting a company in achieving its goals. Organizations that employ internal auditing effectively are better equipped to identify business risks, as well as process and system inefficiencies, take appropriate remedial action, and ultimately promote continuous development. Maintain and improve the reputation of internal auditing; nonetheless, its efficacy and efficiency must be monitored (IIA, 2010).

The effectiveness of internal auditing (IA) is a key component of the Institute of Internal Auditors' definition, but it is also regularly discussed and challenged in reality. Assessing and enhancing the effectiveness of risk management, control, and governance systems is an important aspect of IA (IIARF, 2015).

Dittenhofer (2001) provided one of the earliest and most commonly accepted definitions of AI functional effectiveness. In general, he associates the effectiveness of anything with the fulfillment of a desired state, emphasizing that the internal audit process is effective when it performs the intended objective described by the goal 'Internal Audit'. According to this definition (Mihret D. G., 2007), an internal audit is effective if it produces the desired outcomes, i.e. meets the aims.

The Institute of Internal Auditors (IIA) defines effectiveness as "the degree (including quality) of achieving set goals". The same description can be used to the efficacy and efficiency of an internal audit. Internal audits should develop performance metrics and related measurement criteria that are

appropriate for their environment/organization in order to assess the extent (including quality) to which their actions achieve their objectives. An internal audit has been formed. Internal audits should be monitored and analyzed on a regular basis to ensure their efficacy and efficiency. (IIA, 2010).

Other definitions of effectiveness in the literature focus on internal auditors' acceptance of improvement recommendations. For example, (Sawyer, 1995) indicates that the auditor's job is not complete until the inaccuracy is repaired and maintained. He noted that management's commitment to implementing audit recommendations, as well as its support for strengthening internal audit, are crucial to audit effectiveness. A decade later, Internal Audit (IIARF, 2015) described internal auditing as an impartial activity that assists businesses in improving their operations. In this aspect, the IA function can be regarded effective if the organization follows internal auditors' independent recommendations for improvement (Lenz, 2013). Furthermore, Lenz and Sarens (2012) argue that while impact assessment reports are not effective as an outcome, what is important is not only the intended changes they bring about, but also their concrete and perhaps lasting consequences.

Therefore, according to those definitions establishing performance measures is essential to determine whether the audit activity is achieving its stated goals and objectives, in accordance with the highest practices and quality standards. This thesis examined IA effectiveness from the standpoint of internal auditors, specifically whether management is willing or unwilling to listen to the internal auditor's risk warning messages.

2.1.3. Theories of internal audit effectiveness

(Endaya, and Hanefah, 2013) posit that various theories can be used to develop a theoretical framework for IA effectiveness namely, agency theory, institution theory and communication theory. Overall, a combination of these theories can be used to explain and predict the effectiveness of internal audit functions in different organizations and contexts.

2.1.3.1 Agency theory

According to this idea, internal audit effectiveness is determined by the alignment of the interests of the principals (e.g., shareholders) and the agents (e.g., internal auditors). It asserts that competent internal audit functions can serve as a monitoring method for reducing agency problems, ensuring accountability, and improving corporate governance. (Adams, 1994) states in his work that agency theory can facilitate richer and more relevant study in the field of internal auditing. According to agency theory, internal auditing, like other intervention methods such as financial reporting and external audits, contributes to the maintenance of advantageous contracts between owners and management. Agency theory may not only explain the presence of internal audit in businesses, but it can also explain several

characteristics of internal audit departments, such as size and the scope of the department's duties, including financial and financial elements.

Agency theory can be used to experimentally examine whether cross-cutting discrepancies between internal audit exercises reflect separate legally binding links resulting from organizational form differences or not. Internal auditors, as operators, must conduct audit forms at the proficient level, which necessitates training and certification, involvement, and other abilities required to perform their jobs flawlessly. Internal auditors, as individuals who operate within the organization, require their support. The presence of an effective audit committee within the organization increases internal audit independence and reduces senior administration interference in internal audit scope or execution. (Endaya and Hanafah, 2013).

2.1.3.2. *Institutional theory*

This theory emphasizes the impact of external organization weights on internal audit effectiveness. It recommends that effective internal audit capacities are those that adjust with and accommodate to regulation standards, rules, and practices. Organization theory clarifies the method of institutionalizing a practice in a gather or institution through a precise, organized organization alter of behavior (Clemens, 1999). Compliance with external regulations and industry measures, as well as the reputation and authenticity of the inside audit works, are key components in deciding its effectiveness. Internal auditors' parts have presently ended up much more basic as control inside organizations and a key to successful hazard administration. These parts are considered critical in budgetary administration techniques and are progressively utilized as a solid implies of progressing execution. Regulation scholars see organizations as individuals of an organizational field, which incorporates numerous organizations or businesses that are forbidden in one way or another. This interrelationship causes organizations to impact others based on contrasts in their organizational shape (Mihret et al., 2010).

2.1.3.3. Communication theory

This theory sets that great communication between internal auditors, auditees, and individuals of the public organization is critical to progress the effectiveness of internal auditing. To attain this objective, how internal auditors communicate their discoveries is basic. For example, if internal auditors communicate their discoveries in a way that the auditee sees as accusatory or essentially recognizing shortcomings, this might break down belief between inspectors and auditees. Inside inspectors and auditees, which can make obstructions in Communication. Subsequently, successful communication is fundamental, and the communication handle ought to center on passing on as it were the essential data in a clear, basic, and important way, as well as making criticism instruments (Sambo, and Webb, 2017).

2.1.4. Determinants of IA effectiveness

There are numerous aspects that influence the success of internal audits. Arena and Azone (2009) believe that internal audit effectiveness is influenced by the audit team's qualities, audit activities and methods, and the relationship with the business. Mihret and Yismaw (2007) contend that organizational features either boost or decrease the effectiveness of internal audits. Alzeban and Gwilliam (2014) argue that the capacity of internal audit staff, the freedom of internal audit staff, the back of the administration board, the estimate of the internal audit division, and the relationship between internal and external audit all have a positive impact on internal audit effectiveness.

Several explanatory variables have been identified that have a strong association with internal audit effectiveness in the area studied. Five explanatory variables have been identified for the purposes of this study and measurability.

2.1.4.1. Independence of internal auditing

One element investigated in the literature is the role of internal audit independence. Independence refers to the internal audit function's capacity to carry out its responsibilities without undue influence (Mutchler, 2003). In recent years, professional groups and standards organizations have stressed internal auditor independence (Al-Akra et al., 2016; Oriakhi, 2020). The International Standards for the Professional Practice of Internal Auditing (ISPPIA) state that an organization's internal audit unit must be independent. Standard 1100 states that, in order to ensure the internal auditor's independence and objectivity, the head of the internal audit unit must report officially to senior management and serve on the audit committee of the board of executives. Internal auditors must have unrestricted access to documents, faculty, and divisions, avoid conflicts of interest, and refrain from doing non-audit activities (Coetzee, P., & Erasmus, L. J., 2017, IIA, 2017). Furthermore, Standard 1111 underlines that the review manager's access to the board of chiefs and senior management is unfettered, allowing for complete independence.

Previous research suggests that greater independence and objectivity improves internal audit effectiveness. According to a survey conducted by Mihret et al. (2010), Cohen and Sayag (2010), and Abu-Azza (2012), organizational independence is positively related to audit quality and auditee evaluation, with objectivity and organizational independence contributing to the accuracy of the auditor's work and giving employers confidence that the results and reports can be trusted. The findings of the study (Zulkifli, B., Alagan, S., and Mohd, S., 2014) revealed a significant positive association between independence and objectivity.

According to some researchers, the independence of public sector internal audit is low when compared to other factors such as the competency of the internal audit unit, the size of the audit unit, and

management support, which are considered critical to the success of the internal audit function (Alzeban and Gwilliam, 2014). However, present research indicates that internal auditors have a better level of independence (Oriakhi, 2020; Pham and Nguyen, 2021). George et al. (2015) supported this consensus by indicating that the independence of the internal audit function is the most critical characteristic contributing to enhancing the efficacy of internal auditing when compared to other factors. For satisfactory operations of an internal audit unit (Salehi, 2016, Ali, 2018, Coetzee & Erasmus 2017) also attest that internal audit independence is the foundation of an effective internal audit process.

2.1.4.2. Competence of Internal Auditors

Another factor that has been investigated is the competence and expertise of internal auditors. Internal auditors must have the necessary abilities, expertise, and experience to effectively identify risks, review controls, and provide relevant insights to management. An internal auditor's general experience includes years of experience, abilities, knowledge, training, and competence (Shamki & Alhajri, 2017).

Most research on the efficacy of internal auditing emphasizes internal auditor capacity as the most important aspect. The International Standard for the Professional Practice of Internal Auditing 1210 (ISPPIA) emphasizes the necessity for internal auditors to have the appropriate knowledge, skills, and competences to carry out audit tasks. ISPPIA defines competence as a combination of motivation, personality qualities, self-concept, knowledge, and abilities. According to Wu et al. (2017), motivation, personality traits, and self-concept differ from knowledge and skills in that they are essential personality attributes that cannot be easily gained by training. In contrast, training interventions can be used to uncover and improve knowledge and skills. Alzeban and Gwilliam (2014) associate competencies with education, job experience in internal auditing, professional qualifications, and training, all of which assist auditors in adding value and improving the efficiency of the organization's activities.

This criterion is congruent with Internal Auditing Standard 1210, which states "internal auditors must have a high level of skill, knowledge, and ability to carry out their responsibilities" (IIA, 2017) Demeke et al. (2020) also relate audit experience with the abilities and knowledge that auditors acquire via long-term work in the field of internal auditing. Previous research has demonstrated that internal auditors' capacity is an essential component in determining internal audit effectiveness (Ali, 2018; Baharud-din et al., 2014; Salehi, 2016). Furthermore (Mihret, 2008), research indicates that well-trained and qualified auditors are more likely to improve internal audit effectiveness. According to Wu et al. (2017), internal auditors' capability has a favorable impact on the effectiveness of internal audits, which is based on their ability to solve problems and their resourcefulness in using audit software. As a result, internal auditors' performance is improved by their IT skills and ability to address actual audit problems. Furthermore, the research findings of (Ahmet, 2021) suggest that internal auditors' capacity is heavily

reliant on management support for internal auditing in terms of recruiting highly experienced professionals to carry out internal audit operations.

2.1.4.3. Management support

The support and collaboration of top management and the board of directors have been identified as factors impacting internal audit effectiveness. Management assistance is extremely important to the implementation of internal audits because other decision components rely heavily on it (Ahmet, 2021). According to universal internal audit procedures, internal auditors must be supported by senior management and the board of executives in order to successfully carry out their duties. "The head of internal audit unit should encourage senior management to be involved in internal audit plan and provide them with a detailed plan of internal audit activities indicating the required resources, including significant interim changes, for senior management to review and approve for further progress with other deciding authorities in the company" (Sobel et al., 17). Essentially, Alzeban and Gwilliam (2014) agree that management support for internal auditing entails providing an adequate budget for the acquisition of competent human resources and other assets required for the day-to-day operations of this division. Salehi (2016) discovered that a mindset of praise and appreciation for internal audit exercises can send a powerful message to the entire organization about the importance of internal auditors.

Management assistance can assist internal auditing in carrying out its duties and obligations. Dellai and Omri (2016) see management support as a key factor influencing the execution of internal auditor recommendations. Most research on internal audit effectiveness rank support and collaboration from top management and the board of directors as one of the most essential factors. The commitment and active involvement of these stakeholders in promoting a strong control environment and providing resources for internal audit activities have been found to have a positive impact (Mihret D. G., 2010). Ahmet (2021) has also highlighted the importance of management support for the successful completion of internal auditing tasks. While Lenz et al. (2017) agreed that the chief audit official's engagement with senior management may be a key driver of internal auditing performance. Furthermore, Mensah et al. (2020) discovered a positive relationship between management support and internal audit effectiveness, implying that increased management support for internal audit work is required to obtain adequate resources, appropriate skills, experience, and consistent staff development.

2.1.4.4. Organizational setting

That IA organizational characteristics incorporate numerous variables affecting IA effectiveness; for illustration, Mihret and Yismaw (2007) show that IA organizational setting incorporates its organizational status, its judgment, and its approaches and strategies that empower it to realize valuable audit results. Mihret and Yismaw (2007) argue that the organizational context in which internal audit work takes place has a significant impact on the function's efficacy.

The organizational framework that provides the context and environment for AI to carry out its activities is also a factor that affects IA's effectiveness. It defines the status, structure, and criteria for aligning internal audit for efficiency in providing services to management. Therefore, the organizational framework (Setting) can influence the level of effectiveness that internal audit can achieve. Auditee attributes relate to the auditee's ability to achieve expected objectives. Auditee characteristics that are significant to the effectiveness of the audit include the auditee's ability to achieve organizational subgoals effectively and efficiently; their attitudes toward internal audit; and the level of auditor cooperation (Dassalegnet et al., 2007).

Lack of authority in budget management has a negative impact on the internal audit function's execution (Mihret and Yismaw, 2007). As a result, this function is responsible for managing the claim budget.

2.1.4.5. Information Technology Tools

The use of technology-based audit methods has also become an important part of the internal auditing function. Computer-assisted auditing techniques (CAATs) are computer-based tools and methodologies that help auditors improve both personal and audit function productivity. They can significantly improve audit effectiveness and efficiency throughout the planning, execution, reporting, and follow-up stages (Salehi.T 2016). (Shamki, D., & Alhajri, T.A., 2017) have said that computerized assisted auditing tools (CAATs) greatly accelerate the work of internal auditors.

2.2. Empirical literature review

Several studies have been undertaken to establish the effectiveness of internal auditing, the features of the internal audit function, and the internal audit function's value-add. (Shamsuddin, 2014) investigates the elements that determine the efficiency of internal auditing in Malaysia's public sector. Data were gathered through semi-structured face-to-face interviews with eight internal auditors from three government ministries and one auditor from the Office of the Auditor General (AG). The findings of this paper reveal that internal auditors in the public sector have trouble performing their tasks successfully owing to a lack of independence when auditing their own "boss". Arena and Azzone (2009) performed a survey of 153 Italian enterprises to better understand the organizational elements that influence internal audit effectiveness. The findings indicate that internal audit effectiveness is

determined by the characteristics of the internal audit team, audit processes and activities, and organizational links. Efficiency increases, especially when: the ratio of the number of internal auditors to the number of employees increases, the audit manager is affiliated with the Institute of Internal Auditors (IIA), the company applies automated techniques management - assess control risk, and the audit committee is involved in internal audit activities of internal auditors.

Mihret and Yismaw (2017) also investigated the execution of internal audits in an Ethiopian public division case study among higher education teachers and discovered a favorable relationship between best management support and internal audit execution. As with all case studies, the generalizability of this study's findings is limited. Similarly, Cohen and Sayag (2010), Alzeban and Gwilliam (2014), and George et al. (2015) found that management support is unquestionably a critical factor of audit implementation. The study also indicated a positive and critical relationship between this variable and all of the other elements that influence the execution of internal audits.

Several studies were undertaken to assess the present practices of internal auditing sufficiency in Ethiopian settings. Medhait (2016) investigated the factors impacting IAE in the Commercial Bank of Ethiopia department in Addis Abeba using the census approach. Information was quantitatively examined using descriptive statistics, Pearson correlation, and straight regression analysis. The findings of this study seek to demonstrate a coordinated relationship between auditor competency, organizational independence, management support, and organizational framework in banks. The findings reveal that there is no demonstrably significant negative association between capacity, management support, and internal audit effectiveness. Furthermore, the findings indicate that there is no positive and in fact poor association between organizational system and internal audit efficacy. The analyst discovered a positive and significant association between organizational independence and internal audit effectiveness. These four independent criteria provide 34.5% of the commitment to internal audit effectiveness at Commercial Bank of Ethiopia branches.

This study looked at the elements that influence internal audit effectiveness in Ethiopian private commercial banks, as reported by Wondwosen in 2019. Five hypotheses were proposed, and the study used surveys to gather critical information. A cross-sectional study design was used, as was a purposive testing method, and data was collected using a structured questionnaire, with a total of 168 questionnaires distributed. These five distinct criteria contribute 60% of the total efficiency of internal auditing. According to research, there is a strong positive association between internal audit efficacy and its qualities. On the other hand, organizational setting and managerial support have no significant impact on the internal audit function.

This study includes documents and research on determinants of internal audit effectiveness, such as management support, independence of internal auditors, competency of adequate internal audit staff, and information technology tools examined by various researchers.

2.3. Summary and literature gap

From the standpoint of internal auditors, the study intended to investigate the factors that influence internal audit effectiveness in Ethiopian private banks. The aim of this study is to investigate the elements that make internal audit operations successful in these banks and how internal auditors see these characteristics. The study is to add to the body of knowledge regarding the effectiveness of internal audit in the setting of Ethiopian private banks and offer insightful information about the opportunities and challenges faced by internal auditors in Ethiopian private banks.

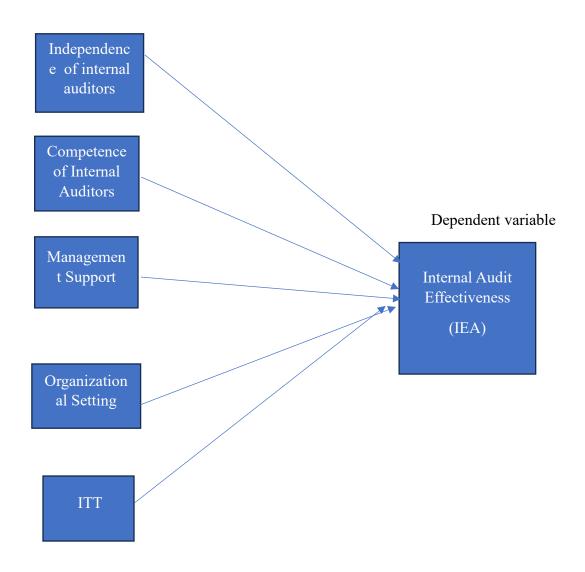
The internal audit function in Ethiopian private banks is not meeting stakeholder expectations due to factors like inadequate resources, deficient skills, inappropriate governance structures, and weak risk management. External auditors rely on internal auditors to assess internal controls, identify operational inefficiencies, and detect fraudulent activities. Ineffective internal audits can lead to higher fees, extended timelines, and lower quality audits. Identifying these determinants is crucial for improving the practice.

There are other literatures like Mihret, Dessalegn Getie, Kieran James, and Joseph M. Mula, (2010) on internal audit effectiveness in other regions or countries (Arena, M., & Azzone, G., 2009) are provide some insights that can be applied in the context of Ethiopian private banks. Such literature may cover areas such as the role of internal auditors, their independence, resources, and training, among others.

Additionally, there may also be other studies like Medanit A. (2016), Solomon (2019), Firehiwot Weldu (2017), and Mihret, (2007) that examine the internal audit practices in Ethiopian private banks; however, they may not focus on the determinants of internal audit effectiveness as perceived by internal auditors. Such studies may provide some insights but may not be sufficient in addressing the research question adequately.

As a result, doing research on the factors of internal audit effectiveness in Ethiopian private banks is critical to filling the literature gap and providing important insights that can be used to improve internal audit practices in the country. Because of the relevance of internal audit effectiveness, several experts have emphasized the need for further inquiry on this topic.

2.4. Conceptual framework Independent variables



Source: Adopted from Miheret and Yismaw, 2007

Chapter 3

3. Research Methodology

The research design and methodology used in this study are detailed in this chapter. Thus, it comprises research design, sample description, data collection tools, instrument validity and reliability, as well as the data collection and analysis procedure.

3.1. Research design

Trochim (2005) defines research plan as "the stick that holds the research extend together." A strategy is used to frame the investigation, demonstrating how all of the primary components of the research extend collaborate to meet the central research objectives." The research plan resembles a formula. Just as a formula provides a list of ingredients and instructions for preparing a meal, an investigation strategy provides the components and procedures for carrying out the study properly. The research strategy is the "backbone" of the investigation convention.

According to Ranjit Kumar (2011), research studies can be characterized as descriptive, correlational, explanatory, or exploratory based on their objectives.

Descriptive study: Attempting to describe a situation, problem, phenomena, service, or program in a methodical manner, such as offering information on a community's living conditions or describing sentiments regarding a topic.

Correlational study: It is the finding or confirmation of relational interdependence between two or more features of a situation. These studies are referred to as correlational studies because they investigate the relationship between two or more components of an event or phenomenon.

Exploratory research: This is when a study is conducted with the goal of exploring an unknown area or investigating the feasibility of conducting a certain research study.

Explanatory research: attempts to explain why and how there is a link between two components of a situation or occurrence. This form of research allows you to investigate and explain the relationships between variables (Saunders et al., 2009).

The researcher used explanatory research to discuss the study's findings. Explanatory studies are showing the causal relationship between variables. Explanatory studies are required when

studying a condition or problem that leads to an explanation of the relationship between variables.

3.2. Research approach

Leedy and Ormrod (2001) define a research methodology as the process by which a researcher collects, analyses, and interprets data. There are three types of research approaches: quantitative, qualitative, and hybrid methodologies.

Quantitative research can be used in response to relational queries about factors in the study. "Quantitative researchers look for explanations and predictions that will apply to other people and places. The goal is to check or validate relationships and make generalizations that contribute to theory" (Leedy & Ormrod, 2001). Quantitative research begins with a problem statement and progresses via the development of a theory, a literature evaluation, and a quantitative information inquiry. According to Creswell (2003), quantitative investigations "employ strategies of inquiry such as experimental and surveys and collect data on predetermined instruments that yield statistical data". Quantitative research can yield predictive, illuminating, and affirming results.

Qualitative research seeks to understand the "why" and "how" of human behavior, experiences, and interactions, as opposed to the "what" or "how many" responses that quantitative methods often provide. The goal is to answer research questions that focus on the main purpose of qualitative research, which is to develop a comprehensive and delicate understanding of people's perspectives, feelings, beliefs, and motivations regarding a specific issue, situation, or phenomenon.

A mixed methods research plan is the process of gathering, analyzing, and "mixing" quantitative and qualitative research findings and methodologies into a single study to answer a research question (Creswell, 2003; Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 1998). An analyst using a mixed methods research strategy aims to capitalize on the strengths of quantitative and qualitative research approaches while minimizing their drawbacks (Johnson & Onwuegbuzie, 2004). The strengths and limitations of different research methodologies are not absolute but rather rely on the situation and how the analyst wishes to approach the issue under consideration.

The research is a quantitative methodology. Both qualitative and quantitative research methodologies are appropriate for this study because the IA efficacy of impact evaluation necessitates both (Mihret et al., 2010). Researchers analyze quantitative data to determine the relationship between independent and dependent variables (Firestone, 1987). While qualitative data comprises the interpretation of quantitative outcomes as well as a detailed explanation of unexpected data in quantitative investigations (Creswell, 2009).

3.3. Data source

3.3.1. Population of study

The first stage in sample design is to determine the population (Creswell 2009). The participants in this study are typically internal auditors working in private commercial banks in Ethiopia. The goal of this study is to look at the determinants of internal audit effectiveness from the perspective of these auditors. As a result, the study's target audience consists of internal auditors working in Ethiopia's private banking industry. These may include senior audit managers, audit administrators, and professionals from the banks' internal audit units.

The research considered using a sampling frame of all private banks head offices' internal auditors. The sampling frame obtained by requesting a list of banks from the National Bank of Ethiopia (NBE). Then we selected internal auditors from each of these banks to participate in the study.

There are 332 internal auditors in the head offices of Ethiopian private banks. From out of this total auditor by using yemane's (1967) statistical formula the sample size of this study will be 182. And the researcher tried to show the number of internal auditors in the head offices of all private banks in appendix 1.

3.3.2. Sample size determination

The sample size will be determined using the statistical formula of (Yamane, 1967) confidence level of 95% and a margin of error of 5%.

$$n = \frac{N}{1 + N(E)2}$$

Where \mathbf{n} ; is the sample size,

N; is the population size = 332,

and e; is the level of precision = 0.05.

Using this formula appropriate sample size will be 182.

3.3.2.1. Sampling techniques

Sampling procedures are critical in doing high-quality research because they allow researchers to select a more representative sample and generalize their findings. Shorten and Moorley (2014) define sampling as the process of selecting a subset of a population for research purposes. Data gathering is based on subcategories because researchers cannot include the complete population in a study. However, sampling approaches demand maximal precision to reduce tolerances and subjectivity while greatly improving overall population representation (Tyrer & Heyman, 2016).

In this study, the researcher discovered that the convenience sampling strategy is better to run this research. It is a non-probability sampling method in which samples are drawn from the population merely because they are easily accessible to the researcher. It is utilized when researchers need to swiftly collect data from a population that is easily accessible and will soon become available. According to (Rahi, 2017), convenience sampling is the practice of gathering data from a research population that is readily available to the researcher.

3.3.2.2. Data collection instrument

Instrumentation refers to the preparation for data collection. It entails deciding on the technique and methods for gathering data. When performing research, data serves as the primary data source. Questionnaires are the most common data collection technique for primary data. The questionnaire distributed to internal auditors at the Ethiopian private bank's headquarters.

The questionnaire covers both independent and dependent factors. Those questionnaires prepared in the form of a Likert-Scale type forming into 5-point levels of "Strongly agree, Agree, Neutral, Disagree, and Strongly disagree" Likeret (1932).

3.4. Method of analysis

Data analysis is the process of systematically gathering, cleaning, transforming, characterizing, modeling, and analyzing data using statistical methods. This process manages the decision-making process by utilizing multiple tools, such as modeling, to find trends, correlations, and conclusions (Start, 2006).

After gathering the data, the following data processing procedures were carried out: Raw data is processed into a format that allows for analysis and interpretation. This is accomplished by ensuring that each question's responses are thorough, consistent, and suitable. The frequency and percentage approaches were utilized to supplement the analytical tool. Additionally, Excel and the Statistical Package for Social Sciences (SPSS) 20 software were used to analyze the data.

Correlation and regression analysis methods were used to determine the relationship between variables and evaluate the study.

3.4.1. Model development

What's the reason? Econometric models are used to quantify the relationship between dependent and independent variables. As a result, it demonstrates the relationship between dependent and independent factors and their effect on internal audit effectiveness.

The model shown below was constructed to evaluate the previously defined study hypothesis. The majority of the independent variables in the model were previously used by audit researchers (Mihret and Yismaw, 2007; Cohen and Sayag, 2010; Arena and Azzone), with the exception of information technology tools (ITT).

$$IAE = \alpha + \beta 1 (IIA) + \beta 2 (CIA) + \beta 3 (MS) + \beta 4 (OS) + \beta 5 (ITT) + \mu$$

Where: $IAE \rightarrow$ the internal audit effectiveness

 $IIA \rightarrow the independence if internal auditors$

 $CIA \rightarrow the competency of internal audit$

 $MS \rightarrow$ the Managements Support,

OS → Organizational Setting

ITT→ Information Technology Tools

 $\alpha \rightarrow$ is a constant, represents the effectiveness of IA when every independent variable is zero.

 β 1-5 \rightarrow is the coefficient, in which every marginal change in variables on internal auditor's effectiveness affects correspondingly.

 $\mu \rightarrow$ the error term

3.4.2. Variable definition

3.4.2.1. Dependent variable

Internal Audit Effectiveness: This variable indicates the degree to which internal audit achieves its objectives in identifying and mitigating risks, improving management processes, and creating value for the organization (Dittenhofer, 2001). This can be measure such as audit plan completion rate, number of recommendations implemented, and stakeholder satisfaction.

3.4.2.2. Independent variables

Independence of Internal Auditing: This variable refers to the extent to which the internal audit function is free from interference or influence from management or other parties. These can be measures such as the lead auditor's reporting line, the level of management oversight, and the presence or absence of a code of ethics.

Competence of internal auditors: This variable refers to the knowledge, skills, and abilities of internal audit staff. It can be measured using metrics such as professional certifications and years of experience.

Management Support: This variable refers to the extent to which the Board of Directors recognizes the importance of the internal audit function and provides the resources and cooperation to make this function effective. It can be determined operationally using measures such as budget allocations, staff size, and management responses to audit findings and recommendations.

Organizational setting: It'll be measured on the perspectives of organizational profile, inside organization, and budget situation of the Internal Audit agency; as well as the organizational arrangements and methods that direct the operations of the audited entity. It gives the setting within which internal audit works (Mihret D. G., 2007).

ITT: relates to practical and functional knowledge of how technology is used in the internal audit function to improve efficiency, effectiveness, and value delivery. It can measure the accuracy of data analysis performed by IT tools and whether IT tools optimize resource allocation or not.

3.4.3. Model validity

Model validity is an essential aspect of any research study. It assesses how well the study measures what it wants to measure. In this case, model validity refers to how accurately the proposed model represents the relationships between the variables in the study.

When using the regression technique, several aspects regarding the validity of the model must be considered in terms of statistical assumptions such as linearity, independence of errors, normality of errors and absence of multicollinearity among predictors. These assumptions are important to ensure the reliability of the validity of the results.

Assumptions: Regression assumes that there is a linear relationship between the outcome variable and the predictor variable, and that the errors are independent and have constant variance. It is important to verify these assumptions before interpreting the regression results.

Normality test: Is used to ascertain whether or not a dataset has a normal distribution. Since many statistical methods presume that the data originates from a normal distribution, this test is frequently crucial in predictive statistics.

Reliability statics: The reliability analysis is crucial for assessing the questionnaire's consistency, especially with regard to the Likert-type scale, as it reflects the general

dependability of the constructs being measured. Cronbach's Alpha (α) is the most often used metric for assessing scale reliability in reliability analysis

Multicollinearity test: is employed in regression analysis to find out whether independent variables have a high correlation with one another. It aids in determining and measuring the degree of relationship between independent variables, which may have an impact on the regression model's correctness and dependability. Researchers can improve the model's performance and interpretability by addressing multicollinearity by eliminating duplicate predictors, changing variables, or applying regularization approaches.

Correlation test: A strong tool for statistical analysis and visualization, the correlation matrix aids analysts and researchers in effectively evaluating the connections between several variables in a dataset.

Chapter 4

4. Analysis and Discussions

4.1. Introduction

The purpose of this study is to determine the factors that influence the efficacy of internal audits in Ethiopian private commercial banks. The results that are gathered from the respondents in various formats, including Likert scale questionnaires and open-ended questions, will be presented and discussed by the researcher.

4.2. Demographic analysis

The questioner is given to the head office internal auditors of Ethiopian private commercial banks, as explained in chapter three. 281 questions were sent out, and 157 of them were collected, for 86.5% percent response rate which is a good response rate. The respondents' demographic characteristics include their sex, age, education background, and prior experience working in an audit department.

| | | | | Cumulative |
|--------|-----------|---------|---------------|------------|
| | Frequency | Percent | Valid Percent | Percent |
| Male | 93 | 59.2 | 59.2 | 59.2 |
| Female | 64 | 40.8 | 40.8 | 100.0 |
| Total | 157 | 100.0 | 100.0 | |

Table 4 1 Gender descriptive analysis (source 2024 SPSS survey data)

When we look at the first character, sex, we see that there were 93 male respondents, or 59% of the total, and 64(41%) female respondents. This indicates that many internal auditors are men, so banks must allow women to work in the audit department when there are internal or external openings.

| | | | | Cumulative |
|-------|-----------|---------|---------------|------------|
| | Frequency | Percent | Valid Percent | Percent |
| 22-30 | 53 | 33.8 | 33.8 | 33.8 |
| 31-35 | 57 | 36.3 | 36.3 | 70.1 |
| 36-40 | 32 | 20.4 | 20.4 | 90.4 |
| >40 | 15 | 9.6 | 9.6 | 100.0 |
| Total | 157 | 100.0 | 100.0 | |

Table 4 2 Age descriptive analysis (source 2024 SPSS survey data)

Many of the auditors that took part in this study, 89 (57%) in all, were between the ages of 31 and 40. 53(34%) of responses are between the ages of 22 and 30. 15 (10%) of the respondents were auditors over 40 years old. According to this report, approximately 91% of internal auditors are between the ages of 20 and 40. If the banks can make full use of this opportunity, several studies indicate that workers in this age range are more productive.

| | | | | Cumulative |
|-------|-----------|---------|---------------|------------|
| | Frequency | Percent | Valid Percent | Percent |
| 1-5 | 55 | 35.0 | 35.0 | 35.0 |
| 6-10 | 68 | 43.3 | 43.3 | 78.3 |
| 11-15 | 28 | 17.8 | 17.8 | 96.2 |
| >16 | 6 | 3.8 | 3.8 | 100.0 |
| Total | 157 | 100.0 | 100.0 | |

Table 4 3 Experience descriptive analysis (source 2024 SPSS survey data)

The other characteristic the researcher examined was experience in the banking industry. The auditors who took part in this survey, the majority 68 (43%), had more than five years but less than 11 years of experience. The second largest group consists of auditors with less than 6 years of experience 55(35%). The third biggest number, 28(18%), are made up of auditors with more than 11 years but less than 16 years of experience. 6 auditors, or 4% of the total, have more than 20 years of experience. Since it is well known that experience breeds knowledge, banks must care when appointing auditors. From what we have from the survey, in experience characteristics in general banks well balanced experience level employee system. The following table will show you the entire demographic characteristics.

| | | | | Cumulative |
|------------------|-----------|---------|---------------|------------|
| | Frequency | Percent | Valid Percent | Percent |
| Bachelor's degre | ee 113 | 72.0 | 72.0 | 72.0 |
| Master's degree | 44 | 28.0 | 28.0 | 100.0 |
| Total | 157 | 100.0 | 100.0 | |

Table 4 4 Education level descriptive analysis (source 2024 SPSS survey data)

None of the respondents had a diploma or less, making qualification the characteristic (Education background). 113 which are 72% of the respondents, have a degree, while 44 (28%) respondents, have a master's degree. There is no one above the masters. This indicates, most banks will need to put in more effort to hire more certified internal auditors.

4.3. Reliability analysis

Reliability analysis is crucial for assessing the questionnaire's consistency, especially with regard to the Likert-type scale, as it reflects the general dependability of the constructions being measured. Cronbach's Alpha (α) is the most often used metric for assessing scale reliability in reliability analysis, and a value of 0.70 or more is considered highly acceptable (Cohen and Sayag, 2010).

Reliability statics

| | | Cronbach's |
|---------|-------------|------------|
| | No of items | Alpha |
| IIA | 3 | .718 |
| MS | 5 | .748 |
| CIA | 5 | .728 |
| OS | 5 | .753 |
| ITT | 5 | .867 |
| IAE | 9 | .769 |
| Overall | 32 | .817 |

Table 4 5 Reliability Statistics (source SPSS 2024)

The reliability analysis value for Cronbach's Alpha (α) in this study is 0.817 for overall variables, as shown in the graph above. As a result, the answers produced by the study's variables were very suitable (reliable) for data analysis.

4.4. Assessment of ordinary least square method

4.4.1. Assessment of normality test

The most important presumption in multivariate analysis is normality (Hair et al., 2010). It describes how data is distributed according to a specific variable and how that distribution corresponds to a normal distribution. Accordingly, for analyses to function correctly and

produce a more reliable conclusion, the data must have a normal distribution (Froh, 2007). According to Pallant (2001) and Hair et al. (2010), the normality of the data must be verified in order to satisfy the underlying assumption of a multiple regression analysis. In practically all multivariate analyses, normality screening is a necessary step (Tabachnick & Fidell, 2007). Kolmogorov-Smirnova and Shapiro-Wilk tests of normality were used and carried out on SPSS to determine whether the data was normal. Field (2009) states that a test that is non-significant

(p > 0.05) indicates that there is no discernible difference between the sample distribution and a normal distribution. As a result, all variables were found to be normal, except management support (MS) and information technology tools (ITT) the presence of normality was mostly accepted at p>.05, as indicated by the test result in table below.

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|-----|---------------------------------|-----|------|--------------|-----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| IAE | .222 | 157 | .059 | .821 | 157 | .061 |
| IIA | .143 | 157 | .071 | .942 | 157 | .056 |
| MS | .181 | 157 | .028 | .906 | 157 | .031 |
| CIA | .226 | 157 | .077 | .878 | 157 | .082 |
| OS | .300 | 157 | .058 | .827 | 157 | .076 |
| ITT | .259 | 157 | .031 | .828 | 157 | .048 |

a. Lilliefors Significance Correction

Table 4 6 Normality test (source SPSS 2024 data survey)

4.4.2. Assessment of multicollinearity

The assumption of no collinearity, often referred to as no multicollinearity, states that there isn't a precise linear relationship between independent variables. Informally, if there is no collinearity, it means that none of regressors in the model can be expressed as precise linear combination of the other regressors.

Strong correlations between the predictors indicate the presence of multicollinearity, which is caused by the Variance Inflation Factor (VIF) being greater than 10, tolerance values below 0.10, and r values greater than 0.80 in the correlation matrix (Field, 2009; Myers, 1990; Pallant,

2007). A statistic called tolerance is used to show how much of the variability of a given independent variable cannot be accounted for by the other independent variables in the model.

| | Collinearity test | | |
|-----------|-------------------|-------|--|
| Variables | Tolerance | VIF | |
| IIA | .560 | 1.785 | |
| MS | .330 | 3.031 | |
| CIA | .236 | 4.245 | |
| OS | .357 | 2.798 | |
| ITT | .824 | 1.214 | |

Table 4 7 Collinearity test (source SPSS 2024 survey data)

All variables have tolerance levels larger than 0.10 and VIF values less than 10, as indicated by Collinearity Table. VIF values were accepted because there were no multicollinearity issues that would have changed the analysis of the results. Additionally, the correlation matrix of all determinants has paired values among the predictors that are less than 0.8 (see table 4.8 below). shows that the r value, tolerance, and VIF values were accepted because there were no multicollinearity issues that would have changed the analysis of the results. However, the multicollinearity test's goal is to determine whether there are several issues with multicollinearity between variables. If independent variables have a strong correlation with one another correlation values more than 0.90 there is an issue (Tabachnick and Fiddel,2001). High correlation among independent variables diminishes their explanatory ability for the dependent variable (Sharma, 1996). Cohen (1988) defined a correlation of 0 as no association at all, 1.0 as a perfect positive correlation, and -1.0 as a perfect negative correlation.

The test findings for this study are shown in Table below, which demonstrates that the range of correlation values between independent variables is -.261 to 0.795. Therefore, there are no issues with multicollinearity in our study.

Correlations

| | | IIA | MS | CIA | OS | ITT | IAE |
|-----|---------------------|--------|--------|--------|--------|--------|-----|
| IIA | Pearson Correlation | 1 | | | | | |
| | Sig. (1-tailed) | | | | | | |
| | N | 157 | | | | | |
| MS | Pearson Correlation | .541** | 1 | | | | |
| | Sig. (1-tailed) | <.001 | | | | | |
| | N | 157 | 157 | | | | |
| CIA | Pearson Correlation | .565** | .791** | 1 | | | |
| | Sig. (1-tailed) | <.001 | <.001 | | | | |
| | N | 157 | 157 | 157 | | | |
| OS | Pearson Correlation | .445** | .682** | .797** | 1 | | |
| | Sig. (1-tailed) | <.001 | <.001 | <.001 | | | |
| | N | 157 | 157 | 157 | 157 | | |
| ITT | Pearson Correlation | 261** | .135* | .031 | .063 | 1 | |
| | Sig. (1-tailed) | <.001 | .046 | .352 | .218 | | |
| | N | 157 | 157 | 157 | 157 | 157 | |
| IAE | Pearson Correlation | .411** | .527** | .654** | .652** | .233** | 1 |
| | Sig. (1-tailed) | <.001 | <.001 | <.001 | <.001 | .002 | |
| | N | 157 | 157 | 157 | 157 | 157 | 157 |

^{**.} Correlation is significant at the 0.01 level (1-tailed).

Table 4 8 Pearson matrix correlation test (source SPSS 2024 Survey data)

4.5. Regression results

Regression analysis was used to investigate the effectiveness of internal audits in terms of organizational environment, internal auditor independence, internal audit staff competency, management support, and information technology tools. The outcome displays signs of internal audit effectiveness based on the model's variables. Using the ANOVA results, the researcher used regression analysis to determine whether or not there is a relationship between the attributes and internal audit effectiveness.

^{*.} Correlation is significant at the 0.05 level (1-tailed).

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|--------------------|
| 1 | Regression | 1736.883 | 5 | 347.377 | 35.188 | <.001 ^b |
| | Residual | 1490.683 | 151 | 9.872 | | |
| | Total | 3227.567 | 156 | | | |

a. Dependent variable: IAE

Table 4 9 ANOVA^a (source SPSS 2024 survey data)

It can be assumed that there is a relationship between the independent variables and the dependent variable if the F statistic is significant. The F statistic for the regression analysis in this study has a probability of $35.188 \ (< 001^b)$, which is below the significance level of 0.05. As a result, the dependent variable and the independent variable found in this research are related. In general, the variable found in this study can be said to be well-fitted by the model.

The table below shows that the dependent and independent variables have a favorable association, as indicated by the multiple R (correlation) value of 73.4% (.734a).

| | | | Adjusted R | St. Error of the | |
|-------|-------|----------|------------|------------------|---------------|
| Model | R | R Square | Square | Estimate | Durbin-Watson |
| 1 | .734ª | .538 | .523 | 3.142 | 1.889 |

a. Predictors: (Constant), ITT, CIA, IIA, OS, MS

Table 4 10 Model Summary^b (source SPSS 2024 survey data)

Table 4.10 shows the study's model summary, demonstrating how strongly internal audit effectiveness and other independent variables are associated. In this study, the R square statistics reveal how much of the independent variable's variance can be explained by the dependent variable. According to the table above, the updated R Square value is 52.3%. It shows that 52.3% of the dependent variables may be explained by independent variables. However, 47.7% are influenced by other factors not addressed in this study. To put it another way, the combined contributions of information technology tools, management support,

b. Predictors:(Constant): ITT, CIA, IIA, OS, MS

b. Dependent Variable: IAE

internal audit staff competency, independence, and organizational environment accounted for 52.3% of internal audit effectiveness.

| | Coefficients ^a | | | | | | | | |
|---|---------------------------|-----------|-------------------|------------|------------------------------|--------|-------|-------------|--------------|
| | | | Unstand Coeffi | | Standardized Coefficients | | | Collinearit | y Statistics |
| | Model | | В | Std. Error | Beta | t | Sig. | Tolerance | VIF |
| Ī | 1 | (Constan) | 1.565 | 3.048 | | .513 | .008 | | |
| | | | | | | | | | |
| | | IIA | .548 | .209 | .194 | 2.626 | .010 | .560 | 1.785 |
| | | MS | 188 | .118 | 153 | -1.592 | .113 | .330 | 3.031 |
| | | CIA | .457 | .139 | .374 | 3.285 | .001 | .236 | 4.245 |
| | | OS | .558 | .145 | .355 | 3.840 | <.001 | .357 | 2.798 |
| | | ITT | .462 | .104 | .270 | 4.435 | <.001 | .824 | 1.214 |

a. Dependent Variable: IAE

Table 4 11Regression result (source SPSS2024 survey data)

Each independent variable's contribution to the model is indicated by the beta (β) sign, which also indicates whether the independent variables' coefficients have a positive or negative impact on the dependent variable (IAE). All the independent variables except management support in this study had positive effects on the expected dependent variable, as indicated by their beta signs. This indicates that every rise in the independent variable causes the dependent variable, internal audit effectiveness to rise as well. Only three independent variables the competence of internal audit staff, organization settings and technology tools at the P<0.01level of confidence, and independence of internal auditors at the P<0.05 level of confidence indicates that they significantly affect the efficacy of internal auditors.

The independent variable that remains which is management support have a significant value greater than P(0.113) > 0.05, do not significantly contribute to the effectiveness of internal audits.

As a result, the following is the model for forecasting perceived internal audit effectiveness:

$$IAE = 1.565 + .548 (IIA) + .457 (CIA) - .188 (MS) + .558 (OS) + .462 (ITT) + 0$$

where;

The internal audit effectiveness was 1.565 when α is set to zero, Management Support (MS), Independence of Internal Auditors (IIA), Organization Settings (OS), Competence of Internal Auditors (CIA), and Information Technology Tools (ITT). The data analysis indicates that, when all other independent variables not included in the study are set to null, an increase of unit in Competence of internal auditors, Independence of internal auditors, Organizational settings, and technology tools will result in an increase in internal audit effectiveness of 0.548, 0.457, 0.558, and 0.462 respectively while an increase of unit in Management support the efficacy of internal auditing will decrease (-0. 188).

4.6. Major findings and Discussions

4.5.1. Independence of internal auditing (IIA)

According to the studies the degree of independence with which internal audit work was carried out is correlated with internal audit effectiveness. demonstrating a statistically significant association between internal audit independence and effectiveness ($\beta = 0.548$, t = 2.626, P<0.01). The result indicates that 54.8% change in IAE.

It is in line with earlier research by Cohen and Sayag (2010), who discovered that independence is essential to ensuring the effectiveness of internal audits. Independence is defined as having unfettered access to all organizational departments and personnel, data and information about the auditee being investigated, making decisions based on the scope, duration, and extent of auditing procedures, completing tasks without intervention. However, the results of this study contradict those of a prior study by Haile Mariam (2014), which revealed no significant correlation between independence and IA effectiveness.

4.5.2. Competency of internal auditors (CIA)

The second variable in this study suggested a direct correlation between the competences of internal auditors and the effectiveness of the internal audit. Internal auditor competences were positively correlated with internal audit effectiveness, as indicated by the positive beta sign and statistically significant results ($\beta = 0.457$, t = 3.285, P<0.01). That (P<0.01) level of significance is well supported by the regression result. The internal auditors' competencies have a substantial P value and a positive coefficient of 0. 457. This indicates that an increase in internal audit staff competency will result in a 45.7% change in internal audit effectiveness.

According to earlier research, one important factor influencing Internal audit effectiveness is the competency of internal auditors. This finding is consistent with those of some earlier researchers (Mihert and Yismaw, 2007; George et al., 2015), who discovered a positive correlation between internal audit effectiveness and internal auditor competency.

4.5.3. Organization settings (OS)

The third variable of this research revealed that there was a direct relationship between the Organizational Setting and the effectiveness of internal audit. The organization setting was positively correlated with IAE, as indicated by the positive beta sign and statistically significant result ($\beta = 0.558$, t = 3.840, P<0.001). The results indicate that 55.8% change in IAE.

This finding was in line with earlier research by Mihret and Yismaw (2007), which found that organizational setting has an impact on audit effectiveness. The findings prove that there is a statistically significant correlation between internal audit effectiveness and organizational settings.

4.5.4. Information technology tools (ITT)

This variable is revealed that has a positive impact on the effectiveness of internal audit. Information technology tools were indicated by the positive beta sign and statically significant results (β = 0.462, t = 4.435, P<0.001). Thus, this result suggests that the use of ITT in the audit process or knowledge of internal auditors on available technology-based audit techniques results in effectiveness of internal audit.

This outcome is in line with earlier research by Ahmet (2021) and Leedy (1998), who noted that computerized assisting auditing tools significantly aid in accelerating internal auditors' labor and improving the caliber of internal audit procedures.

4.5.5. Management support (MS)

Lastly, based on the above regression analysis of the above model there is negative, and no significant correlation was found between the management support and IAE (β = -.188, t = 1.592, P > 0.01).

The findings were not consistent with the previous research (Arena and Azone, 2009; Cohen and Sayag, 2010; Sehewamane, 2014; Yalew, 2015; George & Konstantinos, 2015).

Chapter 5

5. Major findings, Conclusion and Recommendation

5.1. Introduction

The researcher offers that conclusion and suggestion in this chapter. The researcher attempted to illustrate the study's implications and findings in the conclusion section, and the researcher offers a recommendation based on the findings.

5.2. Summary of major findings

To investigate the determinants of internal audit effectiveness (IAE) within Ethiopian selective private banks, this research employed questionnaires to collect primary data from respondents with diverse backgrounds, encompassing varying ages, educational levels, fields of study, and lengths of service. The collected data underwent reliability and validity testing to ensure consistency. Following confirmation of data consistency through reliability testing, the data was analyzed using spreadsheet software (Excel) and SPSS. The results generated by these programs were then presented and interpreted using tables.

Explanatory analysis revealed that the presence of organization setting, followed by independence of internal auditors, competency of internal auditors and information technology tools were the most influential factors contributing to internal audit quality and effectiveness. Conversely, the existence of management support did not appear to significantly contribute to internal audit team effectiveness within the studied Ethiopian private banks.

5.3. Conclusion

The goal of this study was to employ quantitative and qualitative research approaches to investigate the factors influencing internal audit effectiveness in Ethiopian private commercial banks. The study's findings show that a variety of factors influence internal audit success, including internal auditor independence, competence, organizational settings, and information technology tools. The results also indicate that organizational settings is the primary factor influencing the efficacy of internal audits, with Independence of internal auditors, Information technology tools, and Competence of internal auditor coming in second, third, and fourth respectively. However, according to this study, the internal audit effectiveness in Ethiopian private commercial banks is not significantly impacted by the Management support.

The effectiveness of internal audit is increased when auditor independence is protected by granting them the freedom to report audit findings directly to the relevant party, freedom from threats to carry out their duties in accordance with protocol, and access to the information they need to complete their work.

Internal auditors in private banks can improve their competency by staying updated with industry regulations, developing strong analytical skills, enhancing knowledge of banking processes, and building communication skills to effectively convey audit findings. Engaging in continuous training and professional development programs, staying informed about emerging risks, and fostering collaboration with other departments can further enhance their competency levels and that make increase the internal audit effectiveness in bank sectors. Commercial banks should be giving more attention to employing internal audit staff.

The other factor that increases the internal audit effectiveness in EPCBs is readiness to handle effectively internal audits can operate and contribute to the business depends on a number of factors, including organizational culture, structure, leadership commitment, and resource allocation. The organizational setting has a significant impact on the efficacy of internal audits. Transparency, risk management, governance, and internal audit effectiveness may all be improved in a supportive organizational setting, which will ultimately improve decision-making and overall performance in their banks (EPCBs).

The other factor is Information technology tools; by increasing audit efficiency, accuracy, and timeliness, information technology solutions have greatly increased the effectiveness of

internal audits in Ethiopian private banks. These tools will improve data analytic skills, automated procedures, and raise the general efficacy of risk management in banks.

Ethiopian private commercial banks must devote their time and resources on bringing these items to their organization if they are absent.

5.4. Recommendation

Following a review of the study's research and results, the following recommendations are given for Ethiopian private commercial banks (EPCBs) to consider in order to improve the effectiveness of their internal audits. This is because internal auditing is an important method for guaranteeing organizational effectiveness and efficiency, eliminating information asymmetry during decision-making, and maintaining banks' internal control systems in general.

- 1. Since organizational setting has the highest value among all the variables in these banks (EPCBs), it is advised that it be maintained and strengthened further to improve internal audit effectiveness, which in turn improves bank performance overall.
 - To find areas for improvement, managers should conduct regular evaluations of the internal audit function's performance, resources, and structure.
- 2. The study's results show that the placement of competent and adequate staff had a significant impact on the effectiveness of internal audit, suggesting that private banks should think about placing competent and adequate staff in their offices as it is essential to the efficient execution of the internal audition function.
 - Provide ongoing training and opportunities for internal auditors to enhance their skills and knowledge.
 - Allocate sufficient budget to the internal audit function to support its activities and enable it to attract and retain qualified staff.
- 3. Enhance the independence of the private commercial banks offices by prioritizing internal auditors' needs and addressing audit findings to ensure efficient and effective performance. The sensitive nature of the sector necessitates thorough monitoring and respect for the independence of internal audits to prevent harsh consequences for banks. Ensuring independence enables internal auditors to offer relevant reports, allowing stakeholders to make informed decisions.

By granting the freedom to access all information required for activities allowing the bank's internal audit function to be independent of the audited activities and granting the authority to report their findings to the relevant party, EPCBs can ensure the independence of internal auditors.

- 4. Information technology tools play an important role in enhancing the effectiveness of internal audit according to this study so, private banks sector should give an attention for this determinant.
 - Banks should invest in technology to improve the effectiveness of the internal audit function, such as data analytic tools.
- 5. In general, the study suggests that Ethiopian private commercial banks should endeavor to guarantee the availability of essential variables in order to accomplish an efficient internal audit function.
 - By implementing these recommendations, bank management can significantly enhance the effectiveness of their internal audit function, strengthen risk management, and improve overall organizational performance.

5.3.1. Future research directions

The study's findings indicate that the combined contribution of the five independent factors on internal audit effectiveness was 52.3%. This indicates that these five independent variables had a 52.3% contribution to the dependent variable, with other variables not covered in this study accounting for the remaining 47.7%. Other variables were not included in this study but explored by previous researchers in other case study domains may be used in a subsequent investigation on this topic.

References

- Adams, M. (.-1. (1994). Agency Theory and the Internal Audit. *Managerial Auditing Journal Vol. 9 No.* 8, 8-12.
- Adhista, C. (2015). Factors affecting the internal audit effectiveness . *Journal accountancy and auditing*, 110-122.
- Ahmet, O. (2021). Factors affecting the internal audit effectiveness: A research of the Turkish private sector organizations. *Ege Academic Review*, 21(1), 1-15.
- Al-Akra, M., Abdel-Qader, W., & Billah, M. . (2016). Internal auditing in the Middle East and North Africa: A literature review. *Journal of International Accounting, Auditing and Taxation*, 26, 13-27.
- Alhajri, M.O. (2017). Factors associated with the size of internal audit functions: evidence from Kuwait. *Managerial Auditing Journal*, 32(1), 75-89.
- Ali, B. (2018). Factors influencing the effectiveness of internal audit on organizational performance. Journal of Advanced Engineering, Management and Science, 4(4), 219-226.
- Alzeban, A., & Gwilliam, D. (2014). Factors affecting the internal audit effectiveness: A survey of the Saudi public sector. *Journal of International Accounting, Auditing and Taxation*, , 23(2), 74-86.
- Arena, M., & Azzone, G. (2009). Identifying organizational drivers of internal audit effectiveness. *International Journal of Auditing*,, 13(1), 43-60.
- Arens, A. A. (2012). *Auditing and Assurance Services: an Integrated Approach. 14th edition.* New Jersey: Pearson Prentice Hall.
- Badawi, I. E. (2003). "New interagency guidance on the internal audit function". *Bank Accounting and Finance*, 16 (6), , 32-42.
- Baharud-din, Z., Shokiyah, A., & Ibrahim, M.S. (2014.). Factors that contribute to the effectiveness of internal audit in public sector. *International Proceedings of Economics Development and Research*, (pp. 70, 126.).
- Baltaci, M., & Yilmaz, S. (2006). *Keeping an eye on subnational governments: Internal control and audit at local levels.* Washington, D.C: World Bank institute.
- Basel committee on banking supervision. (2012). The internal audit functions in banks.
- C.A, W. (2002). Administers' Perceptions of Internal Auditing Roles and Effectiveness in Texas and Big Twelve Public Enterprises. Texas Southern University.
- Changwony, M. K. (2015). Role of Internal Audit Function in Promoting Effective Corporate Governance of Commercial Banks in Kenya. *International Journal of Business & Law Research* 3(1), 15-33.
- Clemens, E. S. (1999). Politics and institutionalism: Explaining durability and change. *annual review of sociology*, 25, 441-466.

- Coetzee, P., & Erasmus, L.J. (2017). What drives and measures public sector internal audit effectiveness? Dependent and independent variables. International Journal of Auditing, 21(3), 237-248. *International Journal of Auditing*, 21(3), 237-248.
- Cohen, A. &. (2010). The Effectiveness of Internal Auditing: An Empirical Examination of its Determinants in Israeli Organizations. *Australian Accounting Review*, 20(3), 20(3), 296-307.
- consultants, B. r. (2022, 11). *an introduction to internal auditing in banking*. Retrieved from Barclaysimpson: https://www.barclaysimpson.com
- Dellai, H. &. (2016). Factors affecting the internal audit effectiveness in Tunisian organizations . *Journal of Finance and Accounting*, 7(16), 208-221.
- Dittenhofer, M. (2001). Internal Audit Effectiveness: An Expansion of Present Methods. *Managerial Auditing Journal*, 16(8): 443-450.
- Endaya, K. A. and Hanefah, M. M.,. (2013). Internal Audit Effectiveness: An Approach Proposition to develop the theoretical framework. *Research journal of finance and accounting*, 4(10), 92-102.
- Fadzil, F. H. (2005). "Internal auditing practices and internal control". *Managerial Auditing Journal*, , 844-866.
- Field, A. (2009). discovering statistics using SPSS. Sage publications.
- George, D., Theofanis, K., & Konstantinos, A. (2015). Factors associated with internal audit effectiveness. *Journal of Accounting and Taxation*, 7(7),113-122.
- Goodwin, S., & Kent, P. (2006). The use of internal audit by Australian companies. *Managerial auditing journal*, 21(1), 81-101.
- Greaves, M. (2017). The Factors That Determine Internal Audit Effectiveness in the Selected Public.

 The International Journal of Multi-Disciplinary research.
- Gupta, V. (2011). "Cultural basis of high performance organizations",. *International Journal of Commerce and Management, Vol. 21 No. 3*,, pp. 221–240.
- Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate analysis* (Vol. 7th ed.). Upper saddle river, New Jersey: Pearson international education.
- I.D., S. G. (2006). "The Relationship between Internal Audit and Senior Management, A Qualitative Analysis of Expectations and Perceptions". *International Journal of Auditing*, 10(3), 219-41.
- IIA. (2001). Standards for the Professional Practice of Internal Auditing.
- IIA. (2010). Measuring Internal Audit Effectiveness and Efficiency. IPPF Practical Guide. Institute. Institute of Internal Auditors (IIA) Report.
- IIA. (2017). *The international professional practices framework*. Altermonte: Institute of Internal Auditors.
- IIA. (2022). Auditing Capital Adequacy and Stress Testing for Banks.

- IIARF. (2015). *International Professional Practice Framework (IPPF)*. Altamonte Springs,FL: IIA Research Foundation.
- Imran R, Saeed T, Anis-Ul-Haq M and Fatima A.. (2010). Organisational climate as a predictor of innovative work behavior. *African Journal of Business Management*, pp. 3337-3343.
- IPPF. (2017). theiia.org/en/products/bookstore/international-professional-practices-framework.

 Retrieved from Theiia: https://www.theiia.org
- J., F. D. (2000). "Management accountants express a desire for change in the functioning of internal auditing". *Managerial Auditing Journal*, 15(7),, 331-37.
- J.Schwieger, B. (2005). *Definition of internal auditing*. London, Roydon.
- K. H. Spencer, P. (2003). The Internal Auditing Handbook. USA: Wiley and sons.
- Khaled, A. a. (2013). Internal audit effectiveness: an approach proposition to develop a theoretical framework. *Research journal of finance and accounting.*, 4(10): 92-10.
- Kumar, R. (2011). *RESEARCH METHODOLOGY a step-by-step guide for beginners*. SAGE Publications Ltd third edition published 2011.
- Lawrence, B. Sawyer. (1988). *The Practice of Modern Internal auditing Revised & Enlarged (Third Edition)*. USA: IIA INC.
- Leedy, P. &. (2001). *Practical research: Planning and design (7th ed.)*. NJ:Merrill Prentice Hall. Thousand Oaks: SAGE Publications. .
- Leng, J. a. (2014). "Research and discussing on internal control auditing". *Modern Economy, 5(7),* , 785-790.
- Lenz, R. (2013). *Insights into the effectiveness of internal audit: a multi-method and multi-perspective study. Doctoral Thesis. Louvain School of Management.* Louvain School of Management.
- Lenz, R., Sarens, G., & Hoos, F. (2017). Internal audit effectiveness: Multiple case study research involving chief audit executives and senior management. *EDPACS*, *55*(1), *1-17*., 55(1), 1-17.
- Lok, P. and Crawford, J. (2004). The effect of organisational culture and leadership style on job satisfaction and organisational commitment. *Journal of Management Development, Vol. 23 No. 4*, 321-338.
- Medanit A. (2016). Factors affecting Internal Audit Effectiveness A case of Commercial bank of Ethiopia Addis Ababa Branch Office. *St. Mary's University*.
- Mensah, O.A., Ngwenya, B., & Pelser, T. . (2020). Investigating the impact of antecedents of internal audit function effectiveness at a private university in Ghana. *Acta Commercii*, 20(1), 1-11.
- Mihret, D. G. (2007). Internal audit effectiveness: an Ethiopian public sector case. *Managerial Auditing Journal*, 22 (5): 470-484.
- Mihret, Dessalegn Getie, and Getachew Zemenu Woldeyohannis. (2008). Value-added role of internal audit: An Ethiopian case study. *Managerial Auditing Journal 23*, 567-595.

- Mihret, Dessalegn Getie, Kieran James, and Joseph M. Mula. (2010). Antecedents and organizational performance implications of internal audit effectiveness. *Pacific Accounting Review 22*, 224-252.
- MoFED. (2004). Internal Audit Standards and Code of Ethics for Internal Auditors and internal audit procedural manual.
- Mutchler, J. F. (2003). *Independence and Objectivity: A Framework for Research Opportunities in Internal Auditing*. Altamonte Springs: The institute of Internal auditors.
- NBE. (2014/15). Anual report. Addis Ababa.
- NBE. (2023). NBE annual report. Addis Ababa.
- Ogbonna, E. a. (2001). Ogbonna, E. and Harris, L. (2001), "Managing Organisational Culture: Insight From Hospitality Industry. *Human Resource Journal . Vol. 12 No. 1.*, 33-53.
- Oriakhi, S. (2020). Determinants of internal auditing effectiveness in tertiary institutions. *Indonesian Journal of Contemporary Accounting Research*, *2*(1).
- Osibanjo, A. O. and Adeniji, A. A.n. (2013). "Impact of organisational culture on Human Resource Practices: A Study of Selected Nigerian Private Universities". *Journal of Competitiveness Vol. 5 No. 4*, pp. 115-133.
- Pallant, J. (. (2001). SPSS survival manual. A step by step guide to data analysis using SPSS for windows. Allen and unwin Australia.
- Pathak, V., Jena, B., & Kalra, S. . (2013). Qualitative research. Perspectives in Clinical Research. 4(3), 192-194.
- Pham, D.C., & Nguyen, T.T. (2021). Factors affecting the internal audit effectiveness of steel enterprises in Vietnam. *The Journal of Asian Finance, Economics, and Business*, 8(1), 271-283.
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5.
- Salehi, M., Fakhri Mahmoudi, M. and Daemi Gah, A. (2019). A meta-analysis approach for determinants of effective factors on audit quality: Evidence from emerging market. *Journal of Accounting in Emerging Economies, Vol. 9 No. 2.*, pp. 287-312.
- Salehi, T. (2016). Investigation factors affecting the effectiveness of internal auditors in the company: Case study Iran. *Review of European Studies*, 8(2), 224-235.
- Sambo, V.T. and Webb, W.N. (2017). internal audit and ethics: the case of the South Africa social security agency. *administration publication*, 25(4), 146-171.
- Sawyer, L. B. (1995). The Internal Audito. In L. B. Sawyer, An Internal Auditing Philosophy (p. p.46).
- Schein, E. H. (1985). Organizational Culture and Leadership. San Francisco: Jossey-Bass Publishers.

- Shamki, D., & Alhajri, T.A. . (2017). Factors influence internal audit effectiveness. *International Journal of Business and Management*, 12(10), 143-153.
- Shamsuddin, A. (2014). Factors that Determine the Effectiveness of Internal Audit Functions in the Malaysian Public Sectors. International Journal of Business. *International Journal of Business*, 9-16.
- Shewamene, H. (2014). Determinants of internal audit effectiveness in the public sector, case study in selected Ethiopian public sector offices. *College of Business and Economics Department of Accounting and finance Jimma, Ethiopia*.
- Shorten, A. &. (2014). Selecting the sample. Evidence Based Nursing. 17(2), 32–33.
- Smet, D. a. (2011). Improving auditor effectiveness in assessing KYC/AML practices:Case study in a Luxembourgish context. *Managerial Auditing Journal*, 26(2),, 182–203.
- Sobel, P.J., Anderson, U.L., Head, M.J., Ramamoorti, S., Salamasick, M., & Riddle, C. (2017). *Internal auditing: Assurance & advisory services*. The IIA Research Foundation.
- Solomon, W. (2019). factors affecting internal audit effectiveness: in the case of Ethiopian private commercial banks.
- Start, S. (2006). Introduction to Data Analysis Handbook Migrant & Seasonal Head Start Technical Assistance Center Academy for Educational Development. *Journal of Academic*, 2(3), 6-8.
- Tadiwos, M. (2016). Factors Determining Effectiveness of Internal Audit in Ethiopian Commercial Banks. AAU.
- Trochim, W. M. (2005). *Research Methods: The Concise Knowledge Base*. Cincinnati: Atomic Dog Publishing.
- Tyrer, S. &. (2016). Sampling in epidemiological research: Issues, hazards and pitfalls. *British Journal of Psychiatry Bulletin*, 40, 57–60.
- Wu, T. H. (2017). The effect of competencies, team problem-solving ability, and computer audit activity on internal audit performance. 19(5), 1133-1148.
- Yamane, T. Y. (1967). Statistics, an Introductory Analysis (2nd ed.). New York: Harper and Row.
- Zulkifli, B., Alagan, S., and Mohd, S. (2014). Factors that Contribute to the Effectiveness of Internal Audit in Public Sector Malaysia. *Audit in Public Sector Malaysia*, *70*, V70. 24.

Appendix 1 Internal audit effectiveness in Ethiopian private banks

| No | Name of Banks | No of internal auditor in their head offices | Establishment year |
|----|--------------------------------|--|--------------------|
| 1 | Awash Bank S.C | 38 | 1994 |
| 2 | Dashen Bank S.C | 29 | 1995 |
| 3 | Abyssinia Bank | 24 | 1996 |
| 4 | Wegagen Bank S.C | 18 | 1997 |
| 5 | Hibret Bank S.C | 15 | 1998 |
| 6 | Nib Int. Bank S.C | 28 | 1999 |
| 7 | Cooperative bank of Oromia | 32 | 2004 |
| 8 | Lion International Bank S.C | 19 | 2006 |
| 9 | Oromia International Bank S.C | 24 | 2008 |
| 10 | Zemen Bank S.C | 13 | 2008 |
| 11 | Bunna International Bank S.C | 11 | 2009 |
| 12 | Birhan International Bank S.C | 14 | 2009 |
| 13 | Abay Bank S.C | 11 | 2010 |
| 14 | Addis International Bank S.C | 8 | 2011 |
| 15 | Enat Bank S.C | 10 | 2011 |
| 16 | Global Bank S.C | 10 | 2012 |
| 17 | Zamzam Bank S.C | 4 | 2020 |
| 18 | Shabelle Bank S.C | 2 | 2021 |
| 19 | Hijra Bank S.C | 5 | 2021 |

| 20 | Ahadu Bank S.C | 8 | 2021 |
|----|-----------------|----|------|
| 21 | Sinqee Bank S.C | 9 | 2021 |
| 22 | Tsedey Bank S.C | 7 | 2022 |
| 23 | Tsehay Bank S.C | 7 | 2022 |
| 24 | Amhara Bank S.C | 11 | 2022 |
| 25 | Gaada Bank S.C | 7 | 2022 |
| 26 | Omo Bank S.C | 2 | 2022 |
| 27 | Sidama Bank S.C | 2 | 2022 |
| 28 | Raamis Bank S.C | 3 | 2022 |
| 29 | Siket Bank S.C | 4 | 2023 |

Table 4 12 List of Ethiopian private banks (NBE, 2023)

Appendix 2

School of Graduate Studies

Department of accounting and finance

Questionnaire

Dear Participant:

This questionnaire's goal is to gather data about determinants of internal audit effectiveness. The study is being doing in partial fulfillment of the requirements for St. Mary University's Master of Business Administration in Accounting and Finance. Internal audit professionals at the head office will receive the questioners, which will be circulated to all private commercial banks in Ethiopia.

It is anticipated that the study's findings would help pinpoint the variables influencing internal audit effectiveness. As a result, much appreciate your sincere and honest participation in answering the questions. Your responses are kept totally private. I promise not to write your name on this form or use it in any way in relation to the information you provide.

I appreciate your cooperation and participation in advance.

Remedan Nassir

Mobile: 0921543932

Email: alwaysme295@gmail.com

| Section1. General Profile |
|--|
| General Instruction: Please indicate your choice by putting "\" mark in the bracket. |
| 1. Sex/Gender/: Male () Female () |
| 2. Age (in year): 25 to 30 (), 31 to 35 (), 36 to 40 (), above 40 years () |
| 3. Your Service year in the Bank: 1 up to 5 years (), 6 to 10 years (), 11 up to 15 |
| (),16 up to 20 (), above 20 years (), |
| 4. Your Current Level of education: Diploma (), bachelor's degree (), |
| Master's Degree () |

Section 2: **Remark:** The following questions are related to our independent variables and rate their extent to which you agree or disagree that the following statements best describe your organization with the Likert scale type. Use 5-scale ratings whereby; (1=strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree) and please answer carefully the open-ended questions related to our variables.

| | Independence of internal auditors Wondoson Solomon (2019) | |
|---|--|--|
| 1 | The organization's departments, personnel, and all information are freely accessible to internal audit staff. | |
| 2 | Internal audit staff effectively demonstrates appropriate independence in fulfilling their professional tasks. | |
| 3 | Internal auditors are usually permitted to report directly to the appropriate body and include any audit findings into their audit work. | |

| 4. How does the internal audit function maintain its independence from management and |
|---|
| other |
| departments? |
| |
| |

| | Management support Wondoson Solomon (2019) | |
|---|---|--|
| 1 | In response to internal audit recommendations, management immediately implements corrective measures. | |
| 2 | The internal audit department has enough staff to effectively carry out its duties. | |
| 3 | Senior management is aware of the fundamental resources required for internal audits in detail. | |
| 4 | Usually, Senior management supports and encourages the training and development of internal audit staff | |
| 5 | Management is greatfully committed to strengthening the internal audit division. | |

| 6. How does ma | anagement prioritize internal audit recommendati | ons? | | | | |
|-------------------------------|--|-----------------|---------------|-----------------|---------------|-------|
| | | ••••• | | • • • • • • • • | | |
| | | | | • • • • • • • | | ••• |
| | anagement address resource constraints face by the | ne inter | nal au | ıdit | | |
| | | | ••••• | | •••••• | ••••• |
| | Competence of Internal Auditors Wondoson Solomon (2019) | | | | | |
| 1 | Internal auditors possess comprehensive knowledge of the department's operations. | | | | | |
| 2 | The bank audit department always employs skilled and professional people. | | T | | | |
| 3 | Internal auditors regularly attend educational seminars for ongoing training. | | T | | | |
| 4 | Internal auditors take a proactive approach and controlling the situation rather than simply responding. | | | | | |
| 5 | Repeatedly internal auditors communicate with auditees. | | | | | |
| | | | | • | • | |
| 6. How would y your team? | you describe the technical expertise and knowled | ge of th | ne inte | rnal au | ıditors | in |
| | | • • • • • • • • | | • • • • • • • | | ••• |
| 7. How do interand emerging r | rnal auditors stay updated with changes in regulatisks? | ions, a | ccoun | ting sta | andard | ls, |
| | | | • • • • • • • | • • • • • • • | • • • • • • • | |

| | Organizational setting Endalkachew Nigussie (2017) | | | |
|---|---|--|--|--|
| 1 | The bank's internal audit department has a high enough standing within the hierarchy. | | | |
| 2 | The internal audit department has an enough budget for the anticipated auditing activity. | | | |
| 3 | Internal audits are always guided by comprehensive policies and procedures. | | | |
| 4 | The bank seriously takes specified criteria to assess auditees' activities. | | | |
| 5 | The internal audit department has sufficient resources to carry out its responsibilities. | | | |

| 6. How do regulatory frameworks impact the internal audit effectiveness in your organization? |
|---|
| |
| |
| 7. How do impact on your staff if do not have sufficient resources to carry out your |
| responsibilities? |
| |

| | Information Technology Tools | |
|---|--|--|
| 1 | The organization actively use technology- | |
| | based audit procedures. | |
| 2 | Totally computer-based tools and approaches | |
| | allow auditors to boost both their personal | |
| | and audit function productivity. | |
| 3 | IT tools give thorough data analysis, helping | |
| | internal auditors manage risks more | |
| | successfully. | |
| 4 | Data security and integrity are certainly | |
| | ensured by IT, which is essential for accurate | |
| | and trustworthy audit results. | |
| 5 | By streamlining repetitive operations with | |
| | the use of IT tools, you can highly increase | |
| | overall productivity by concentrating on | |
| | more difficult and judgment-demanding jobs. | |

6. How do internal auditors collaborate with IT tools during audits?

| | • • |
|--|-----|
| | |
| 7. What challenges do internal auditors face when auditing IT processes? | |
| | • • |

This is our dependent variable rate the extent to which you agree or disagree that the following statements best describe your organization. Use 5 scale rating whereby: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree

| | Internal Audit Effectiveness | Likert- scale | | | | |
|---|--|---------------|---|---|---|---|
| | Wondoson Solomon (2019) | 5 | 4 | 3 | 2 | 1 |
| 1 | Internal audit is performed in accordance with the IIA Standards (ISPPIA) | | | | | |
| 2 | Appropriate recommendations are made by internal audit to enhance organizational procedures. | | | | | |
| 3 | Internal audit regularly assesses and enhances the governance and risk management processes' effectiveness. | | | | | |
| 4 | Internal audit always evaluates if the goals and missions of organizations are in line with each other. | | | | | |
| 5 | Internal audit regularly evaluates whether risk responses are suitable and consistent with the risk tolerance of the bank. | | | | | |
| 6 | Internal audit always evaluates the effectiveness and efficiency of programs and activities. | | | | | |
| 7 | Internal audit immediately shares the outcomes of its engagements. | | | | | |
| 8 | Internal audit regularly assesses the likelihood of fraud occurring as well as the organization's fraud risk management practices. | | | | | |
| 9 | Internal audit always examines the accuracy and consistency of financial data. | | | | | |

| lease suggest if you face any kind of idea in evaluation of internal audit effectiveness in your |
|--|
| ank that is not addressed in this questionnaire. |
| |
| |