



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

**FACTORS AFFECTING INTERNAL AUDIT EFFECTIVENESS:
IN THE CASE OF ETHIOPIAN PRIVATE COMMERCIAL BANKS**

**BY: WONDWOSEN SOLOMON
MBAAF/0373/2008A**

**January, 2019
ADDIS ABABA
ETHIOPIA**

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ADVISOR: ABRAHAM GEBREGIORGIS

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**January, 2019
ADDIS ABABA
ETHIOPIA**

ENDORSEMENT

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

Advisor

St Mary's University, Addis Ababa

Signature

January, 2019

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APPROVED BY BOARD OF EXAMINERS

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DECLARATION

I, Wondwosen Solomon, hereby declare that the thesis work entitled “Factors affecting internal audit effectiveness: In the case of Ethiopian Private Commercial Banks” submitted by me for the award of the degree of Masters of Business Administration Accounting and Finance St. Mary’s University, is my original work and it has never been presented in any university. All sources and materials used for this thesis have been duly acknowledged.

Name Wondwosen Solomon

Signature: _____

Abstract

In recent years, there has been an increasing interest in internal auditing. This study has examined the factors affecting internal audit effectiveness in the Ethiopian private commercial banks. Five hypotheses were formulated based on a comprehensive review of past literature. The study used primary sources of data through questionnaires. A cross-sectional survey design was employed, purposive sampling method was used and data were collected using structured questionnaires, with total of 168 questionnaires were distributed to internal auditors of all Private commercial banks, and 147 (a 87.5% response rate) had collected. The data were run with SPSS version 20 and standard regression analyses were carried out to examine the attributes of internal audit effectiveness. All of these five independent variables are making 60% explained internal audit effectiveness. The study found that there existed significant positive relationships between the factors (Independence and objectivity of internal auditors, Competency of internal audit staffs, Existence of audit committees) and internal audit effectiveness. However, Organizational Setting and Management support have no significant effect on internal audit effectiveness. But, private commercial banks should understand that the contributions of these variables were collectively significant to identify any noncompliance activities in their office and to add values for the internal audit effectiveness. This study provides useful information to practitioners and academics who are interested in identifying the determinants of internal auditing effectiveness.

Keywords: Internal audit effectiveness, Organizational Setting, Independence and Objectivity, Competency, Management supports, and Audit committees.

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LIST OF ACRONYMS

IA	-Internal Audit
IIA	-Institute of internal auditors
IAE	-Internal Audit Effectiveness
SPSS	-Statistical Package for Social Science
IPPF	-International Professional Practices Framework
ISPPIA	-Institute of Standards on the Professional Practice of Internal Audit
IAF	-Internal Audit Function
COMP	-Competency of internal audit staffs
OrS	-Organizational Setting
EAC	-Existence of an audit committee
InO	-Independence and objectivity of internal auditors
MgS	-Management Support
OLS	-Ordinary least Squares

CHAPTR ONE

1. Introduction

This chapter demonstrates about: background of the study, statement of the problem and continued with the research questions, objective of the study, research hypotheses, significance of the study, scope of the study, limitation of the study and organization of the study.

1.1. Background of the Study

Currently, an internal audit is considered an integral part of management and an essential element of strong corporate governance. Dynamic changes in the global economy, the complexity of regulations and technological advances in recent years have set new tools and directions of development of internal audit, which support management and create added value to the organization. These capabilities also resulted in the new image of an internal auditor with an extended set of skills and best practices adapted to the requirements of the environment (Olga, 2017).

The developing role of the internal auditing is also reflected in its current definition. The Institute of Internal Auditors (2004) defined internal audit as “an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization to accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.”

The new definition perceives internal auditing mandate much more broadly, charging it with helping the organization accomplish overall objectives. In the light of the evolution of internal audit, a new concept began to have a particular attention in the audit literature; it is the effectiveness of internal audit. Indeed, being effective is the challenge that internal audit should successfully overcome to be the key component of good governance. In this context, it is important to explain the concept of internal audit effectiveness and identify critical factors that contribute to creation of “added value” of internal audit (Hella and Mohamed, 2016).

With the rising demand for audit services, there are scientific and practical deliberations on the evaluation of the effectiveness of internal audit in the company. Researchers from different countries and members of the Association of the Institute of Internal Auditors in a number of studies try to find proper measures to evaluate the audit work both from the theoretical and practical point of view (Olga, 2017).

Effectiveness becomes the main aspect that affects the achievement of an organization. So, the organization must decide to do some activities which will help them. The internal audit must be effective that they could achieved the goals of their audit activity. Internal audit effectiveness is the measurement to evaluate whether the internal audit function is able to achieve the goal of that function (Adhista, 2015).

Organizations with effective internal audit activities are better able to identify business risks, take appropriate corrective action, and ultimately support continuous improvement. Effective internal audit function could be a major asset for improving public confidence in financial reporting and corporate governance if it contain these element; Organizational independence, a formal mandate (Existence of approved audit charter), Unrestricted access, Sufficient funding, competent leadership, competent staff, existence of audit committee, stakeholder support, professional audit standards and limited scope (Belay, 2007; Smet and Mention, 2011). To achieve the internal audit effectiveness, we had to pay attention to the factors that might affect it (Adhista, 2015). Therefore, internal audit effectiveness is essentials in the objective achievement of an organizations and in line with this, organization whether private or public should make sure that their internal audit is effective so that to achieve their objective in an efficient manner.

According to National bank of Ethiopia (NBE) report currently in Ethiopia there are 17 commercial banks including the dominant government owned bank known as Commercial Bank of Ethiopia, and the other sixteen private owned commercial banks. Every bank should have an internal audit department on which with regard to the volume and nature of its activities it can rely. The objective of this study is to investigate factors affecting internal audit effectiveness of private commercial banks in Ethiopia. These findings contribute to existing literature by providing evidence on the most significant factors of internal auditing effectiveness.

Accordingly, it can help internal auditors to focus on these specific factors in order to generally improve internal audit function.

1.2.Statement of the Problem

Internal audit effectiveness has become a fruitful topic over the decade, because of the important roles play by the internal auditors in organizational survival and achievement (Mu'azu and Siti, 2013). The growing importance of internal auditing as an economic factor has led to systematic research into the factors that improve the performance of internal auditing. According to the Institute of Internal Auditor Research foundation (2008) “an internal auditor is a forward looking individual, who knows and understands business systems and ensures the management that they operate rightly and achieve firm goals.”

The reality is that internal auditing today still focuses on traditional activities. Internal auditors often spend most of their time solve day-to-day problem. The majority of internal audit departments do not have authority, scope, and responsibilities of internal auditing are not spelled out and no measures exist to ensure that the internal audit function (Mihret and Yismaw, 2007). Adding more value to their companies operations and contributing to the achievement of corporate objectives are expected from internal audit. However, internal audit function is not designed in a way that adds value to the organization. As a result, internal auditors' inability to prevent irregularities and perform their duties as expected of them. That is why proper internal organization is also essential factor that lead to the achievement of internal audit effectiveness.

The internal audit must be so effective that they could achieved the goals of their audit activity (Adhista, 2015). Mihret and Yismaw (2007) explain that an internal audit function is effective when it able to achieve the stated objectives or goals. 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).

All the stakeholders will benefit from having a strong Internal Audit Function (IAF) which will provide value to the other cornerstones of corporate governance (Smet and Mention, 2011). The importance of internal audit has been significantly increased to consider a wider role of internal consultant for better risk management performance, providing objective assurance and enhancing the value of the organization (Tran Thi, 2018). With this intention internal audit effectiveness in recent years has received special attention from researchers. Added value delivered by internal audit become more and more relevant, which makes quite necessary to recognize the determinant factors in creating this added value. Therefore, it is of great importance to identify the factors affecting internal audit in order to be effective (Hella and Mohamed, 2016).

There are several studies conducted on the factors of internal audit effectiveness. However, limited studies have been conducted in Ethiopian financial sector are the major contributors of the country's economy, especially commercial banks now that is seriously battling with fraud and irregularities at all levels. In addition, the researcher could not find any related literature in Ethiopia that considers testing the effect of Audit committee along with the other significant factor of internal audit effectiveness. Previous studies Arena and Azone (2009); Riham (2013); Winston and George (2016); Seif (2017) reveal that is a linkage between audit committee and the effectiveness of internal audit. Audit committees can be viewed as a key safeguard mechanism for internal auditors in managing their professional objectivity. Riham (2013) reveals that an effective audit committee strengthens the position of the internal audit function, and participation of audit committee in the internal audit tasks has its own contribution on the effectiveness of internal audit. Moreover, due to the important for internal audit to be effective, researchers see for instance Mihret and Yismaw (2007); Cohen and Sayag (2010); Endaya and Hanefah (2013); Shewamene (2014) calling for more research to be conducted on internal audit effectiveness especially by using other attributes of internal audit effectiveness. Therefore, this study is attempting to fill the literature gap by examining the internal audit effectiveness attributes and international standards for the professional practice of internal auditing and prior literature variables identified as significant factor.

1.3. Research questions

This study aims to address the following research questions:

- Does the Competency of internal audit staffs affect internal audit effectiveness?
- Does the support given by the Management to internal auditors enhance the internal audit effectiveness?
- Does the Independence and objectivity of internal audit have an effect on internal audit effectiveness?
- Does organizational setting affects internal audit effectiveness?
- Does existence of Audit committee enhance internal audit effectiveness?

1.4. Objectives of the study

1.4.1. General Objective

The overall objective of the study is to examine the factors affecting internal audit effectiveness of Private commercial banks in Ethiopia.

1.4.2. Specific Objectives

The research has the following specific objectives:-

- To examine the effect of Competency of internal audit staffs in achieving effectiveness of internal audit;
- To investigate the effect of management support in achieving effectiveness of internal audit;
- To identify the effect of Independence and objectivity to the effectiveness of internal audit;
- To examine the effect of Organizational Setting to the effectiveness of internal audit; and
- To investigate the effect of Audit committee existence to the effectiveness of internal audit.

1.5. Research Hypothesis

After reviewing the related literatures, the researcher tried to fill it by developing the following guiding research hypotheses. They are formulated to achieve the broad objective:

H1: Organizational settings have positive and significant impact on the internal audit effectiveness.

H2: Independence and Objectivity have positive and significant impact on the internal audit effectiveness.

H3: Competences of the internal auditors have positive and significant impact on the internal audit effectiveness.

H4: Management supports have positive and significant impact on the internal audit effectiveness.

H5: Existences of Audit committees have positive and significant impact on the internal audit effectiveness.

1.6. Significance of the study

The regulatory environment is becoming more demanding of board of director and their audit committees who need independent assurance that they can rely on internal audit. Hence, this study is initiated to contribute the existing knowledge of the relevance of internal audit effectiveness. Further, there is a limitation of literature on the area of effectiveness of internal audit in Ethiopia especially in case of commercial banks now that is seriously battling with fraud and irregularities at all levels. So, the study contributes to the existing literature regarding the effectiveness of internal audit and related sectors. The study identifies additional factor not examined by the previous Ethiopian commercial banks related research which is expected to have significant effect on the effectiveness of internal audit. In addition, this study will be serving as an additional reference material to those of whom doing their research on this topic.

1.7.Scope of the Study

The study restricted to Ethiopian private commercial banks with a focus on head office internal audit staffs. In addition the intent of this study is to investigate the selected factors affecting internal audit effectiveness: Organizational setting, Independence and Objectivity, Competency of internal audit staffs, Management supports and Existence of Audit committee.

1.8. Limitation of the Study

This study has methodological limitations. It is questionnaire-based, and a measure of the variables, both the dependent and independents variable, is established according to the perceptions of the internal auditors. In spite of the researcher's efforts to gather the necessary information as much as possible, this study little bit changed the previous trend and identify the source factor which considering the availability of literature source in this area.

1.9.Organization of the study

This study consists of five chapters. The chapters discussed following this chapter are the literature, methodology, discussion and analysis and conclusion and recommendations. The second chapter provides a literature review informing the reader of what is already known in this area of study. It covers theoretical review, empirical review and the conceptual framework. The third chapter discusses the methodology employed in the study, including, the research design, the characteristics of the study population, sample and sampling techniques, data collection, and statistical tools used in the study. The fourth chapter is about data analysis and discussion of results. Finally, the fifth chapter contains summary, conclusions, recommendations and suggestions for future research.

CHAPTER TWO

2. Literature Review

This chapter presents review of related literature of internal audit, some of theories of internal auditing and types of audits performed by internal auditors. Reviews empirical literature on internal audit effectiveness and its determinants and international standards for the professional practice of internal auditing used to build up factors affecting internal audit effectiveness. And conclude with a conceptual framework which is developed from the theories and literature reviewed.

2.1. Internal Audit overview

Historically, internal auditing was perceived as being limited to merely ensuring that the accounting and underlying records to an organization's transactions were properly maintained, that the assets management system was in place in order to safeguard the assets and also to see whether policies and procedures were in place and duly complied with. Until the mid-20th century internal auditors were primarily concerned with checking accounting records and detection of financial errors and regularities. Internal auditing emerged as a profession in 1941 when the IIA was founded in New York by a group of practicing Internal Auditors. The first Certified Internal Auditor examinations were written in 1974 to test the knowledge of individuals against a recognized body of knowledge before they become Internal Auditors (Greaves, 2017).

In 1978, the Institute of Internal Auditors (IIA) defined internal auditing as “An independent appraisal activity established within an organization as a service to the organization, it is a control, which functions by examining and evaluating the adequacy and effectiveness of other controls, the objective of Internal Auditing is to assist members of the organization in the effective discharge of their responsibilities. To this end, internal auditing furnishes them analysis, appraisals, recommendations, counsel and information concerning the activities reviewed.”

The modern scope and focus of internal auditing are reflected in the current definition that was formally adopted by the IIA in 1999.

Institute of Internal Audit (2004) defined internal audit as “an independent, objective assurance and consulting activity designed to add value and improve an organization’s operations. It helps an organization to accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.” This definition shows the fundamental purpose, nature, and scope of internal auditing and also shows how internal auditing shift from traditional to contemporary definition. IIA also explains what perspectives the new definition of internal auditing hold its assurance and consulting activity should proactive, customer and key area focused including risk management, control and governance process. The new definition perceives internal auditing mandate much more broadly, charging it with helping the organization accomplish overall objectives (Hella and Mohamed, 2016).

According to the Institute of Internal Auditor Research foundation (2008) “an internal auditor is a forward looking individual, who knows and understands business systems and ensures the management that they operate rightly and achieve firm goals.” This shows the major scope of the internal auditors are making assurance to the organization and giving consultant services to the overall managements of the corporate governance. By providing the independent opinion and conclusions regarding the operation, function, system and wellbeing of the organization the internal audit can provide assurance services; and by giving the advisory service based on the specified requests of an engagement client the internal auditor can give the consulting service to the organization (Hella and Mohamed, 2016).

Internal audit is the independent appraisal of activity within an organization for the review of accounting, financial and other business practices as a protective and constructive arm of management. It is a type of control which functions by measuring and evaluating the effectiveness of other types of control. Auditors not only provide assurance about these controls, but also consult senior management for better improvement of these controls. Auditors may

provide substantial aid to the management of the enterprise by identifying possible negative events that may negatively affect enterprise objectives, strategies or business models. On the other hand, internal audit is a critical appraisal of functioning of various operations of an enterprise including the functioning of the system of internal check. Exceptions from normal functioning of internal check system are exposed in internal audit. Accuracy, completeness, reliability and timeliness of accounting information are tested and reported for remedial action. Non-accounting areas with the operational side of enterprise are critically studied, analyzed and weakness of the system or practice with inefficiency, wastage and frauds are brought to the notice of the management. Suggestions for increasing the effectiveness of the system, for improving the productivity and profitability of business practices are offered (Tandon, 2010).

Extending the scope of internal audit from the strictly financial function to the assurance and advisory function which plays an important role in managing the company has also resulted in the need to increase the efficiency of audit services (Olga, 2017). Internal auditing is a profession and activity involved in advising organizations regarding how better to achieve their objectives through managing risks and improving internal control. Internal auditing involves the utilization of systematic methodology for analyzing business processes or organization problems and recommending solutions. The scope of internal auditing within an organization is broad and may include various internal control activities such as the review of the effectiveness and efficiency of operations, the reliability of financial reporting, investigations of fraud, risk assessment, safeguarding of assets and compliance with laws and regulations (Greaves, 2017).

In the light of the evolution of internal audit, a new concept began to have a particular attention in the audit literature; it is the effectiveness of IA. Indeed, being effective is the challenge that internal audit function should successfully overcome to be the key component of good governance. In this context, it is important to explain the concept of IA effectiveness and identify critical factors that contribute to creation of “added value” of IA (Hella and Mohamed, 2016). Internal audit has to face a significant challenge consisting in finding the best and relevant method for measuring the efficiency and effectiveness of internal audit and quantifying the progress made in achieving its goals and objectives. Internal audit must find answers to

difficult question like Which method of assessing and measuring internal audits performance is more effective and relevant? Until now, there is no consensus among researchers either about the factors influencing internal auditing and how it can be measured, or the best framework for internal audit effectiveness. This could be partly related to lack of sufficient attention to the theories (Endaya and Hanefah, 2013).

2.2.Theoretical Frameworks

Gill and Johnson (2002) defined theory as a formulation regarding the cause and effect relationships between two or more variables, which may or may not have been tested. A number of studies exist which had been relating to internal auditing theories. The approach which is adopted from Endaya and Hanefah (2013) is a combination of three theories: agency, institutional, and communication. In this study the argument is that agency theory, institutional theory and communication theory could serve as an approach to build a theoretical framework of internal audit effectiveness.

2.2.1. Agency Theory

Agency theory means the relationship between agent and principal, where agent is management and principal is the shareholder. In decision making process of an organization, agents have the authority to make decisions. Managers work with the organization as agents to perform some service on behalf of owners who delegate some decision making authorities to managers. These authorities could be misused by managers to meet their own personal interests. Therefore, the existence of the audit committees and the external and internal auditors will help the organization in enhancing their performance, and also will ensure that the management carries out its plans according to procedures (Adams, 1994). Internal auditors as agents must perform audit processes at the professional level requiring education and professional certifications, experience, and other competencies needed to perform their responsibilities perfectly. Internal auditors, as agents of the organization members, need their support. The existence of an effective audit committee in the organization enhances internal audit independence and also, reduces senior management interferences either in internal audit

scope or its performance (Endaya and Hanefah, 2013). For this reason this study should consider Agency theory for independent variable selection.

2.2.2. Institutional Theory

Institutional theory explains how organizational structures and practices are shaped through changes induced by normative pressures, including both external and internal sources such as laws and regulations or by the professions (Mihret et al., 2010). Internal auditors' roles have now become much more essential as a control within organizations and a key to effective risk management. Internal auditors' roles are considered crucial in financial management strategies and increasingly used a dependable way of enhancing performance. Institutional theorists consider organizations as members of an organizational field, which comprises several organizations or industries that are interrelated in some way. This interrelation leads organizations to influence others (Mihret, James and Mula, 2010)

The researchers suggest a need for future research to address the internal audit effectiveness by using institutional theory. Mihret, et al. (2010) argue that there is a positive relationship between compliance with International Standards for Professional Practice of Internal Auditing (ISPPIA) and organizational goal achievement, and this relationship could evaluate internal audit effectiveness (Endaya and Hanefah, 2013). For this reason this study should consider Institutional theory for independent variable selection.

2.2.3. Communication Theory

According to communication theory, inability to communicate effectively can be related to inappropriate information or communication complexity (Endaya and Hanefah, 2013). Both IIA Standards and previous studies, the study of effective communication in internal auditing is necessary. The existence of effective communication between internal auditors themselves, internal auditors and auditees, internal auditors and organization members, without any doubt, is needed to strengthen the internal audit effectiveness. However, there are several factors, which could contribute to the weakness of this relationship such as, accusatory style from internal auditors or just looking for the auditees weaknesses. Such environment leads to lack of

trust among internal auditors and auditees. Thus, to prevent such threats, it is necessary to improve auditees collaboration with internal auditors (Endaya and Hanefah, 2013). For this reason this study should consider communication theory for independent variable selection.

2.3.Types of Audits Performed by Internal Auditors

Internal audits are conducted for different reasons and with varying objectives and with each type of risk exposure an organization would need to conduct a particular type of internal audit. Some audits are required by regulation or policy, while others are requested by management to help improve processes or identify internal control weaknesses (Olga, 2017). The following is a summary of the various types of audits which will generally be conducted in an organization:

2.3.1. Operational Audit

Operational audit evaluates performance of a particular function or department to assess its efficiency and effectiveness. Financial data may be used, but the primary sources of evidence are the operational policies and achievements related to organizational objectives. Internal controls and efficiencies may be evaluated during this type of audit. Some areas of operational audits include: organizational structure, processes and procedures, accuracy of data, management and security of assets, staffing, and productivity (Arens, Best, Shailer and Fiedler, 2005; Olga, 2017).

2.3.2. Compliance Audit

Compliance Audit evaluates an area's adherence to established laws, standards, regulations, policies, and procedures. Compliance audits are done because of a policy or statutory requirement. While the audit is done for regulatory reasons, the objectives are still to ensure adequate control over an important internal process (Arens et al., 2005; Olga, 2017).

2.3.3. Financial Audit

Financial Audit is a historically oriented, independent evaluation performed for the purpose of attesting to the fairness, accuracy and reliability of financial data. The central objective is to ensure that the financial activity of the department, unit or area is completely and accurately reflected in the appropriate financial reports (Arens et al., 2005; Olga, 2017).

2.3.4. Follow up Audit

Follow up Audit is audits conducted approximately six months after an internal or external audit report has been issued. They are designed to evaluate corrective action that has been taken on the audit issues reported in the original report. The purpose of a follow-up audit is to revisit a past audit's recommendations and management's action plans to determine if corrective actions were taken and are working, or if situations have changed to warrant different actions (Arens et al., 2005; Olga, 2017).

2.3.5. Investigative Audit

Investigative Audit is an audit that takes place as a result of a report of unusual or suspicious activity on the part of an individual or a department. Fraud and financial irregularity audits are designed to verify the existence and magnitude of suspected fraud and financial irregularities. It is usually focused on specific aspects of the work of a department or individual. Investigations are conducted to determine the extent of loss, assess weaknesses in controls, and make recommendations for corrective actions conducted at the request of the Audit Committee of the Board of Trustees, the President, or other senior members of organization management as a result of a tip from the organization's hotline; or at the discretion of the Director (Arens et al., 2005; Olga, 2017).

2.3.6. Information Technology Audit

Information technology (IT) Audit is evaluates controls related to the institution's automated information processing systems. The information technology audit function develops audit programs to assess, evaluate and make recommendations to management regarding the adequacy of internal controls and security inherent in an organization's information systems, and the effectiveness of the associated risk management. The goal is to ascertain that IT systems are safeguarding assets, maintaining data integrity and efficiently operating to achieve business objectives (Olga, 2017).

2.3.7. Management Audit

Management Audit Also called performance audit, are internal consulting projects. Because an internal audit is an activity independent of management, it is often an excellent resource to provide independent and objective insight on the efficiency of business processes. Management can request internal auditors to review a business process, organization, or strategy and the auditors do not have to worry about backlash from management. A common management audit is a review of organizational structure, such as having internal audit look at how administrative work is divided among divisions and if there are opportunities to be more efficient (Olga, 2017).

2.3.8. Grant and Contract Audits

Grant and contract audits are designed to evaluate the contracting process, compliance with the provisions of grants and contracts, and third-party contractual performance. These audits may be performed with respect to any function, activity, department, or unit of the organization and may include all types of contracts; e.g., federal and private grants and contracts, construction contracts, and professional service contracts (Arens et al., 2005).

2.4. Internal Audit Effectiveness

Organizations whether public or private has established internal audit department with the mind of enjoying the benefit behind the internal audit service (Mu'azu and Siti, 2013). The effectiveness of internal audit function has become a subject of interest in the internal auditing literature. The word effectiveness has been defined by different researchers, for instance Dittenhofer (2001) view effectiveness as the ability toward the achievement of the objectives and goals. Mihret and Yismaw (2007) defined internal audit effectiveness as “the extent to which an internal audit office meets its supposed objective or the extent to which it meets the intended outcome.” Arena and Azzone (2009) defined effectiveness “as the capacity to obtain results that are consistent with targets objective.” In addition, 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). Previous studies have

used different approaches to investigate internal audit effectiveness, as effective internal audit is influenced by series of factors.

The other issue that has emerged, relative to internal audit effectiveness, is what are proper and sound measures of the department's effectiveness. In establishing the measurement for internal audit effectiveness, Arena and Azzone (2009) reveal that the percentage of recommendations implemented by the auditee is the most appropriate measure for internal audit effectiveness. Similarly, Mihret and Yismaw (2007) asserted that audit findings and recommendations would not serve much purpose unless management is committed to implement them. While, Mizrahi and Ness Weisman (2007) give their own definition which is in line with the ability of the internal auditor intervention in prevention and correction of deficiencies and they finally defined internal audit effectiveness as "the number and scope of deficiencies corrected following the auditing process."

In the IIA Practice Guide 'Measuring Internal Audit Effectiveness and Efficiency' issued in December 2010, Effectiveness and efficiency measurements can be quantitative and qualitative. In addition to compliance with the IIA's International Standards for the Professional Practice of Internal Auditing (Standards), audit activity performance measures may include: Level of contribution to the improvement of risk management, control, and governance processes; Achievement of key goals and objectives; Evaluation of progress against audit activity plan; Improvement in staff productivity; Increase in efficiency of the audit process; Increase in number of action plans for process improvements; Adequacy of engagement planning and supervision; Effectiveness in meeting stakeholders' needs; Results of quality assurance assessments and internal audit activity's quality improvement programs; Effectiveness in conducting the audit; Clarity of communications with the audit client (auditee) and the board.

The report of the Institute of Internal Auditors published in 2015 shows the practical side of various models of effective internal audit in the private sector in the UK and Ireland. The study of various organizational systems of internal audit showed an increase in added value to organizations as well as raising the skills and qualifications of auditors. The study has identified elements of effective internal audit: Excellent knowledge of the organization and the specifics of

the sector in which it operates; Experience and expertise allowing to increase the scope of functions in the areas of finance, IT, project management, customer relations (knowledge of regulations, national and international regulations, current standards and best practices); Flexibility and ability to respond quickly to new risks and threats; Confidence and trust on the part of management; Independence and objectivity; Planning risk-oriented internal audit with transparent audit methodology; Preparation of recommendations and acting as an advisory oriented at the objectives of the organization; High level of quality of services provided; Coordination and cooperation with other departments that perform control and assurance functions; Effective teamwork; Career development opportunities; Continuous improvement of qualifications and the duty to conscientiously perform the audit work (Olga, 2017).

John Bendermacher, Chair of IIA Netherlands forward his view on Measuring the Effectiveness of the Internal Audit Function Practical tools for internal auditors (2016). “When can an IAF be considered effective? Cannot give a definitive answer to that question it depends on many factors such as: in what sector do you work, how has your mission statement been worded, and how do you collaborate with the Executive Board, Supervisory Board and external auditor” Thus, it can be assumed that the effectiveness of IA is still understudied.

Internal audit effectiveness is the measurement to evaluate whether the internal audit function is able to achieve the goal of that function (Adhista, 2015). Even though, the degree of internal audit effectiveness tends to vary within organizational levels as well as country (Al-Twaijry, Brierley and Gwilliam, 2003). The management of organizations should have a clear objective for internal auditors to achieve, given the available resources and other means that might aid the achievement of such objectives. It is argued that the effectiveness of an internal audit unit depends on the expectations of relevant stakeholders even though systematic and generally valid measures can be used to gauge IA effectiveness (Dittenhofer, 2001).

2.5. Factors that affect Effectiveness of Internal Audit

As the main aim of this research is to investigate the factor that affect the effectiveness of internal audit in the commercial banks sector, in this topic different authors and researcher’s idea and recommendations regarding the related topic of internal audit are analyzed and presented. There are a lot of factors affecting the internal audit effectiveness (Adhista, 2015).

The study conducted by Mihret and Yismaw (2007) investigated that internal audit service of a large public sector higher educational institution, by identify factors influencing internal audit effectiveness by considering four interrelated factors: internal audit quality, management support, the organizational setting and attributes of the auditee. They concluded that internal audit quality and management support have strong influence. However, organizational setting and auditee attributes do not have a strong impact influence on internal audit effectiveness. In their study, Arena and Azone (2009) argued that factors affecting the internal audit effectiveness are characteristic of the audit team, activity and audit process, and the organization relationship. Further they indicated that internal audit effectiveness increases in particular when the ratio between the number of internal auditors and employees grows, the Chief Audit Executive is affiliated to the Institute of Internal Auditors, the company adopts control risk self-assessment techniques, and the audit committee is involved in the activities of the internal auditors.

Cohen and Sayag (2010) As demonstrated by their study results, there appears to be high correlations between the perceptions of top management support and IA effectiveness while positive relationships is found between auditing of higher quality, organizational independence and IA effectiveness. The other determinants of internal audit effectiveness derive from support of top management. In their study, Alzeban and Gwilliam (2014) argued that competence of internal audit staff, independence of internal audit staff, management support, the size of internal audit department, and the relationship between internal and external auditor have positive correlation with the effectiveness of internal audit. In addition, Hella and Mohamed (2016) study found that the effectiveness of IA is positively influenced by the independence of internal audit, the objectivity of internal auditors, the management support for internal audit, the use of internal audit function as a Management training ground, and the sector of organization. Seif (2017) the study confirmed that the prior IA effectiveness research, a strong relationship between Internal Audit Quality, Competence of Internal Audit Team, Audit Committee, Top Management Support, and Independence of Internal Audit and effectiveness of IA. Tran Thi (2018) Result reveals that the effectiveness of internal audit is influenced by the

independence of internal audit, the competence of internal audit, the management support for internal audit and the quality of internal audit.

On the other hand, Shewamene (2014) has investigated factors which have an effect on internal audit effectiveness in the selected Ethiopian public sector offices; found that the management support, the existence of adequate and competent internal audit staff, the availability of approved IA charter contributed for the internal audit effectiveness. The other two variables the management perception and organizational independence of internal auditors were positively related with internal audit effectiveness but not significant. Tadiwos (2016) the study found that independence of internal audit, competence of internal audit team, and management supports were strong and have statistically significant effect on the effectiveness of internal audit. Hawa (2016) the study found that independence, management support, competence and organization setting do have an impact on the effectiveness of internal audit. Medanit (2016) the study found that organizational Independence and Organizational settings positively affect the internal audit effectiveness.

A review of mentioned resources reveals five factors related to the effectiveness of internal audit Organizational setting, Independence and Objectivity, Competency of internal audit staffs, Management supports and Existence of Audit committee. For each of these factors, the related professional statements as well as previous literature variables identified as significant factor and considering the three theories employed by (Endaya and Hanefah, 2013), and international standards for the professional practice of internal auditing.

2.5.1. Organizational Setting

In the recent years, internal auditing (IA) has undergone dramatic changes that have extended its area of involvement in a way that allow it to add more value to a company (Hella and Mohamed, 2016). Internal audit function is not designed in ways that add value to the organization. Organizational setting refers to the organizational profile, internal organization and includes the status of internal audit in the organizational structure; the goodness of internal audit office's internal organization; budgetary status of the internal audit office; and the existence of sound established criteria to evaluate auditees practices and also the organizational policies and

procedures that guide operation of auditees. The International Standards for the Professional Practice of Internal Auditing (ISPPPIA) has laid down the standards of attribute of Standard 1000. The purpose, authority, and responsibility of the internal audit activity must be formally defined in an internal audit charter. It provides the context in which internal audit operates their activities to regulate the internal audit to make it effectiveness to provide service for the management. The internal audit function of an organization should be given a sufficiently high status in the organizational structure to enable better communication with senior management and to ensure independence of internal audit from the auditees. Independence is of paramount value in providing effective internal audit service to the management, for it affords an atmosphere of objective and uninhibited appraisal and reporting of findings without influence from the units being audited. Extending the scope of services by widening the range of systems and activities audited, with appropriate risk analysis, would improve audit effectiveness. Thus, organizational setting can exert influence on the level of effectiveness that internal audit could achieve (Mihret and Yismew, 2007). Medanit, (2016); Hawa (2016) found that organization setting do have an impact on the effectiveness of internal audit.

2.5.2. Independence and Objectivity

The International Standards for the Professional Practice of Internal Auditing (ISPPPIA) Standard 1100 requires that the internal audit department must be independent and internal auditors must be objective in achieving their work to add value to the organization. Standard-setters have emphasized the importance of independence and objectivity of internal auditors. ISPPPIA defined Independence and Objectivity as: “The internal audit activity must be independent, and internal auditors must be objective in performing their work.” They interpret objectivity as: unbiased mental attitude that allows internal auditors to perform engagements in such a manner that they believe in their work product and that no quality compromises are made. Objectivity requires that internal auditors do not subordinate their judgment on audit matters to others. ISPPPIA and the IIA suggest that such independence can be gained by means of reporting to levels within the organization that allow the internal audit department to perform its responsibilities free from interference; avoiding conflict of interests; having direct contact with the board and senior management; having unrestricted

access to records, employees and departments; the appointment and removal of the head of internal audit not being under the direct control of executive management and not performing non-audit work.

The factor that may affect the effectiveness internal audit activities is the need of organizational independence and objectivity which can allow the audit activity to conduct work without interference by any party. The independence and objectivity of internal auditing is with respect to both assurance services and consulting for the organization. Independence and objectivity are closely related where the freedom from conditions that may threaten objectivity and no significant quality compromises are made during rendering the audit service.

The few researchers that have examined this issue have found that the greater the independence and objectivity of internal audit department, the greater the internal auditor's effectiveness. A survey conducted by Mihret et al. (2010); Cohen and Sayag (2010); Abu-Azza (2012) found that organizational independence was positively related to the auditing quality and the auditees' evaluations, coupled with objectivity, organizational independence contributes to the accuracy of the auditor's work and gives employers confidence that they can rely on the results and reports. Zulkifli, Alagan and Mohd (2014) result of the study there were significant positive relationships between independence and objectivity.

2.5.3. Competency of Internal Audit staffs

Competency can be relate to the ability of an individual to perform a job or task properly base on the educational level, professional experience and the effort of the staffs for continuing professional development. Auditors' competency determines the effective auditing in the organization (Zulkifli, et.al., 2014). Alzeban and Sawan (2013) have mentioned that internal auditors should be adequately qualified and in possession of all requisite skills and knowledge to carry out responsibilities related to audit duties. Internal auditors must possess appropriate knowledge, skills and other competencies necessary for undertaking their personal responsibilities. Internal audit department, as a whole, also needs to have or attract the required knowledge, skills and other capabilities and competencies for meeting its responsibilities. If

internal audit lack knowledge, skills, or other capabilities and competencies needed to perform all or part of their assurance services, the head of the internal audit department should make use of powerful and competent consultants to compensate for such deficiencies of the department (Tabandeh, 2016). In order to achieve competency, various types of training and development should be provided to internal auditors. A competent internal auditor will have all the skill necessary to produce a good audit report (Amanuddin, 2014)

Standard-setters have always emphasized on the importance of internal auditors who present appropriate level of knowledge, skills, and other competencies needed to meet tasks and responsibilities of internal audit department. ISPPIA Standard 1210 defined Proficiency“ collective term that refers to the knowledge, skills, and other competencies required of internal auditors to effectively carry out their professional responsibilities.” Competence of the internal auditor is auditor’s abilities to applied what he/ she knows to carry out audit activities properly. The Institute of Internal Audit claimed that auditors competencies is a key element in effective internal audit activities. Auditors competency contributes to the ability of the auditors to perform the systematic and discipline audit approach to improve the effectiveness of internal audit. IA can effectively carry out their duty in the public sector if there are enough IA personnel with required competencies. This competence intern depends on educational level, professional experience, continuous training, and the effort of the staffs for continuing professional development (Mihret and Yismaw, 2007). Alzeban and Gwilliam (2014) argue that higher internal audit effectiveness is associated with greater competence of internal audit staff. Cohen and Sayag (2010; George, Theofanis and Konstantinos (2015) found that professional efficiency of internal auditors is integral for the effectiveness of internal auditing. Alzeban and Sawan (2013) have mentioned that internal auditors should be adequately qualified and in possession of all requisite skills and knowledge to carry out responsibilities related to audit duties. Abu-Azza (2012), Mihret et al. (2010) found that competence of internal auditors positively related to perceived IA effectiveness. In addition many prior academic researchers have focused on the need for an internal auditor to be sufficiently qualified if a high level of effectiveness is to be achieved (Abu-Azza, 2012; Mihret and Yismaw, 2007). Finally, increased internal audit effectiveness appeared

to have association with higher internal audit competence. Previous studies suggest that competence of internal auditors is a critical determinant of IA effectiveness.

2.5.4. Management Support

ISPPIA highlights the importance of the relationship between internal audit and senior management and how management can support internal audit. The management support is almost crucial to the operation and internal audit; because all other determinants of IA effectiveness derive from the support of top management, given that hiring proficient IA staff, developing career channels for IA staff, and providing organizational independence for IA work are the results of decisions made by top management (Cohen and Sayag, 2010). The commitment by management to use audit recommendations and its support in strengthening internal audit is key to internal audit effectiveness (Greaves, 2017).

A number of previous studies found that without management approval, support, and encouragement, the IA audit process are likely to face failure and worse time and money wasted (Zulkifli et.al., 2014). Reports have focused on the crucial importance of the nature of the relationship between senior management and internal audit and investigated a variety of factors that contribute to this relationship (Alzeban and Gwilliam, 2014). The success of IA function will depend on the strength of management's support for the auditing process. They have to accept the fact that the IA process is just as critical and important activity as any other process within the organization. Cohen and Sayag (2010) similarly, Alzeban and Gwilliam (2014) indicated that management support is positively and significantly associated with internal audit effectiveness. Without management approval, support, and encouragement, the IA process is likely to face failure. Some Internal Audit function appears to be doing well, the determining factors appear to be the attitude and leadership qualities of the head of an organization and audit reports that are ignored by everyone. Mihret and Yismaw (2007) on their study also found that management support significantly affects internal audit effectiveness. Poor management support for internal audit may affect perception of auditee on internal audit performance and also affect the motivation of internal auditors to contribute their best capacity for the effectiveness of internal audit function. George et al. (2015) argued that management

support is positively associated with internal audit effectiveness. Cohen and Sayag (2010) found that there is high correlation between top management support and internal audit effectiveness and also the only variable consistently related among the variable. Alzeban and Gwilliam (2014) found that management support was the most important factor influencing IA effectiveness within the Saudi Arabian public sector organizations. Most of literature also concluded that management supports to internal audit as determinant and important factor for internal audit effectiveness.

2.5.5. Existence of Audit Committee

Internal auditors, as agents of the organization members, need their support. The existence of an effective audit committee in the organization enhances internal audit independence and also, reduces senior management interferences either in internal audit scope or its performance (Endaya and Hanefah, 2013). The internal auditor's risk-driven efforts provide critical inputs to other governance participants, including the audit committee and management. In developed countries, the audit committee has the role of a mediator between the management and internal audit. This makes the role of management support less important than in developing countries, where audit committees are new. This issue is controversial even in developed countries, the executive management is directly in a position, or indirectly through the audit committee, and it affects to a certain degree the nature of work of the internal audit. When the management considers the internal audit function as positive, then the function is likely to be more effective (Alzeban and Gwilliam, 2014). As reported by studies in the past, there is a linkage between audit committee and the effectiveness of internal audit. For instance, can be seen in the study by George et al., (2015) Further, studying the linkage between audit committees quality, Audit committee is also examined in some studies as available associated with internal audit effectiveness. In line with the above study, focus on 364 Italian companies, Arena and Azzone (2009) point out that internal audit's structural characteristics may influence its effectiveness. The results also imply that internal audit effectiveness increases when audit committee is involved in the internal auditor's activities. Mu'azu (2014) did a study on the audit committee to give empirical evidence about the influence of audit committee on internal audit. Riham (2013) audit committees can be viewed as a key safeguard mechanism for internal

auditors in managing their professional objectivity. Winston and George (2016) the study concluded that there was a significant statistical relationship between the organizational independence of the audit committee and effectiveness of the internal audit. Seif (2017) The result of the study confirmed the prior IA effectiveness research, the study found a strong relationship between Audit Committee, and effectiveness of IA.

A number of researchers have provided studies regarding the effectiveness of internal audit with specific emphasis on the effects of management support, independence of internal auditors, management perceptions, competent internal audit staff and the availability of internal audit charter. The fact that effective IA can contribute to the significant impact to the quality of management has raised the interest for researchers to explore into this matter. The effectiveness of internal audit greatly contributes to the effectiveness of each auditee in particular and the organization at large. Therefore, this study attempts to determine the variables that are linked to either attribute standards or performance standards that International Standards for the Professional Practice of Internal Auditing (ISPPA) has established (IIA, 2016). In particular, ISPPA has laid down the standards of attribute of Standard 1000 The purpose, authority, and responsibility of the internal audit activity must be formally defined in an internal audit charter; the audit competence namely Standard 1200 as well as the internal audit Independence and Objectivity namely Standard 1100, IPPF's performance standards of internal audit effectiveness. This study attempts to add the literature with its development of a conceptual understanding of IA effectiveness in organizations aside from examining IA in terms of its determinants of effectiveness. It is important that the factors impacting effectiveness of IA is understood because it contributes to organization's improved performance.

The purpose of the literature review section of a research article is to provide the reader with an overall framework what is known about a topic from previous research. From the empirical literature studied it can be noted that efficiency in internal audit performance has an influence on the operational outcomes, in this study, Independent variables are critical success factors that consist of five items namely Organizational Setting, Independence and Objectivity, Competency of internal audit staffs, Management supports, and Existence of Audit committee.

Therefore, this study also aims to ascertain the relationship between effectiveness of internal audit function and the independent variables that affect the internal audit task accomplishments in case of Ethiopian Private commercial banks.

2.6. Conceptual Framework

Based on Mihret and Yismaw (2007); George, et al. (2015); Hella and Mohamed (2016) and Seif (2017) literature review, the following conceptual framework is formulated by researcher which has five main factors influencing the effectiveness of internal audit.

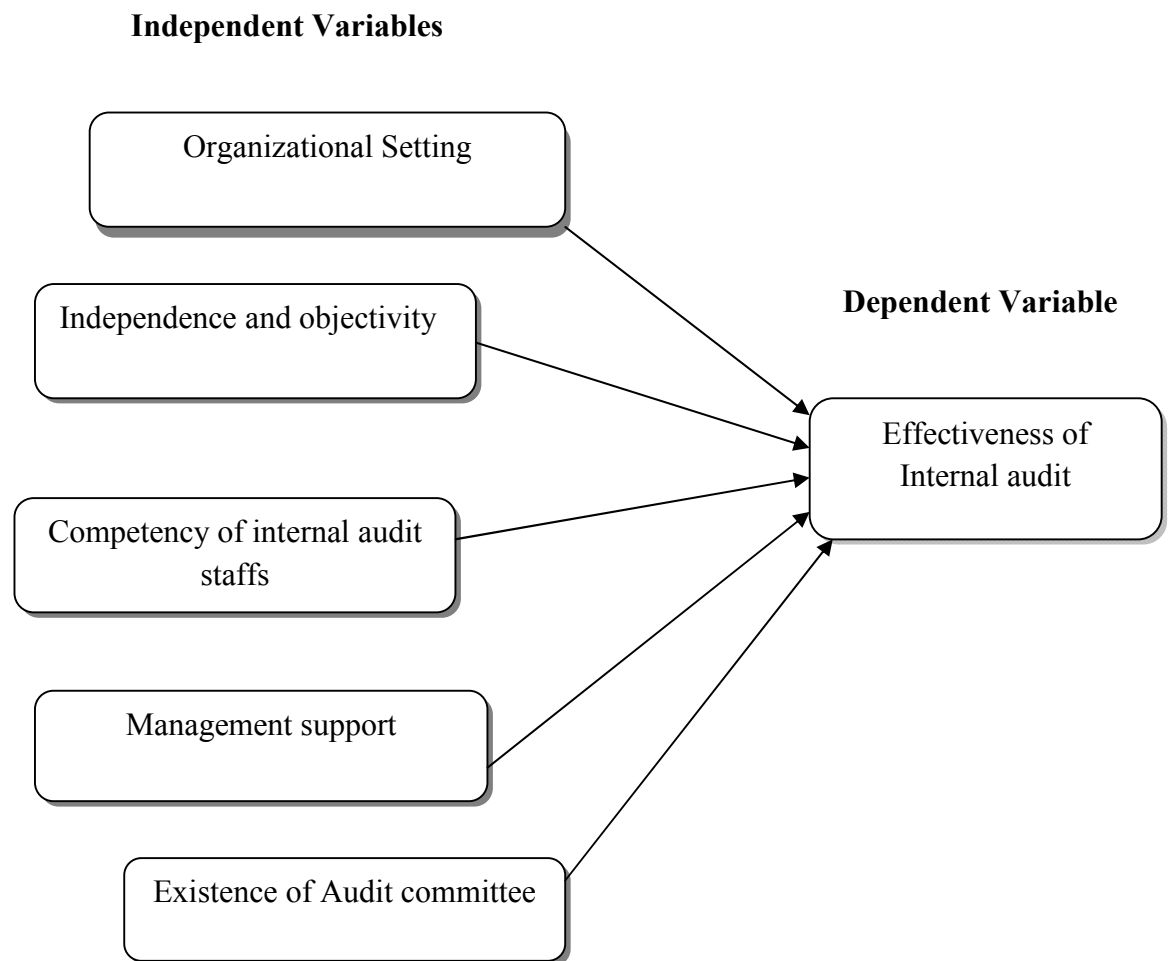


Figure 1: Conceptual framework for the Factors that Affect the Effectiveness of Internal Audit

CHAPTER THREE

3. Research Design and Methodology

3.1. Introduction

This chapter describes the research design, research approach, the sources of data, research method the characteristics of the study population, sample and sampling techniques and statistical tools used in the study. It explains the type of data used for the study and the techniques employed in identifying the factors affecting internal audit effectiveness of Ethiopian Private commercial banks.

3.2. Research Design

This study is expected to investigate on the factors affecting internal audit effectiveness of Ethiopian private commercial banks. Explanatory studies are showing the causal relationship between variables (Saunders, Lewis and Thornhill, 2009). Explanatory study is used to analyze for data collected from internal auditors. The reason behind using explanatory type of research to explain, understand and predict the relationship between variables through statistical tests such as regression. A cross-sectional survey is employed for a data collected and analyzed more than one case at a single time. When cross-sectional survey is used, data can be collected at one point of time not overtime like longitudinal (Creswell, 2009). Therefore, In this study the researcher applied a self administered questionnaires is conducted to know the factors affecting internal audit effectiveness with regard to, Organizational Setting, Independence and Objectivity, Competency of internal audit staffs, Management supports, and Existence of Audit committee.

3.3. Research Approach

This study used deduction approach because the conceptual framework is built based on the previous studies and testing the proposed hypotheses. Deductive approach is also helpful for identifying the causal relationships among factors by collecting data using a quantitative method testing the hypothesis. Quantitative aspect of the study is intent to find data needed to generalize the result to the population as stated (Marczyk, DeMatteo and Festinger, 2005).

Quantitative method is also used to test a theory by examining the factors based on the previous studies, identifying the research relationships and obtaining the findings. It can generalize research findings when the study collects data from a sample which represents its population to avoid their own attitude affecting the results. Therefore, in order to achieve the objectives of this study and thereby to give answer for its problems, quantitative method is used by the researcher.

3.4. Population and Sampling of the Study

3.4.1. Population of the Study

Define the population is the first step in designing the sample (Creswell, 2009). The population of the study is Ethiopian Private commercial banks internal audit staff. Currently, there are 16 private Commercial Banks in Ethiopia. Therefore, the population of the study is internal auditors of Ethiopian Private commercial banks head office internal audit staff around 292 in number.

3.4.2. Sampling of the Study

The researcher was used purposive sampling method, the rationale behind using purposive sampling method to choose, and picks only those best meet the purpose on the study that can be logically assumed to be representative of the population. In addition to this study identify target individual with known experience or expertise in an area. The researcher use the following sample size determination formula to determine the sample size of the population in 16 Commercial Banks. The formula was developed by Taro Yamane (1967).

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

Where **n** is the sample size,

N is the population size =**292** internal auditors, and

e is the level of precision or sampling error = (**0.05**)

Hence, the total sample size is **168**

The study is conducted on all private Commercial Bank's head offices internal auditors. A sample was used because of the costs in terms of funds, time and materials that could be involved in surveying the whole population. The total population of the study is 292 and sample 168. Since the number of internal auditors in each bank is not the same. Therefore, the population and proportion of samples taken from each bank of the study are listed here under.

Table 3.1. List of Private Commercial Banks in Ethiopia

No.	Private Commercial Banks	Year of Establishment	No. of Internal Auditors in Head office	No. of Sample Internal Auditors in Head office
1	Awash International Bank S.C	1994	35	20
2	Dashen Bank S.C	1995	26	16
3	Bank of Abyssinia S.C	1996	21	12
4	Wegagen Bank S.C	1997	20	11
5	United Bank S.C	1998	17	10
6	Nib International Bank S.C	1999	32	18
7	Lion International Bank S.C	2006	30	17
8	Oromia International Bank S.C	2008	18	10
9	Buna International Bank S.C	2009	22	13
10	Zemen Bank S.C	2009	11	6
11	Abay Bank S.C	2010	10	6
12	Berhan International Bank S.C	2010	13	7
13	Addis International Bank S.C	2011	6	3
14	Cooperative Bank of Oromia S.C	2011	12	7
15	Debub Global Bank S.C	2012	10	6
16	Enat Bank S.C	2012	9	6
Total No. of Internal Auditors at Head Office			292	168

Source: NBE for Year of establishment

3.5. Sources of Data

Primary data source is employed in this research. Primary sources allow the researcher to examine the evidence firsthand without the opinions, analysis, and interpretations of others. The survey questionnaire helps the researcher to collect a primary source of data. Questionnaires allow the collection of large amounts of data within a short period of time. To collect the data from the respondent structured questionnaire was used. These were distributed to the internal audit staff of the banks and their response was assumed to be filled using experience, attitude, opinion and perception.

3.6. Methods of Data Collection

The questionnaires was prepared in the form of five item Likert-Scale type, where the lowest scale represent strongly disagree and the highest scale represent strongly agree (Likert, 1932). The data collected using questionnaire converted to represent the variables in the hypotheses. The survey is the most relevant to the study which follows deduction approach and quantitative method. The questionnaire is structured in regard with the research hypotheses and the relevant literature review. Firstly, questions were selected mainly by five surveys that examined similar research field: (Arena and Azzone, 2009; Seif, 2017; Hella and Mohamed 2016; George, et al., 2015; and Mihret and Yismaw, 2007). The questionnaire is organized in two sections. The first part, deals about respondent general information which are related with the participant's background. The second part holds Likert scale questions those were targeted to analyze research hypothesis in manageable, uniform and objective way.

3.7. Data Analysis

After the data is collected, the following activities on data processing have been carried out. The raw data is converted into suitable form for analysis and interpretation. This achieved through check the completeness, internal consistency and appropriateness of the answers to each of the questions. Statistical Package for Social Science (SPSS) software for version 20 is employed to run the data through the statistical tools used for this study, namely descriptive analysis, correlation and multiple regression analysis. According to the survey instrument selected which is likert scale questionnaire model, the researcher used ordinal (ranked) type of categorical data.

In this aspect, the data collected using questionnaire converted to represent the variables in the hypotheses. This is through taking mean values of the item responses for each construct. Mean values are chosen because item responses that ranged from “Strongly Agree” to “Strongly Disagree” generate ordinal data (Mihret, et al., 2010). In order to assess the reliability and consistency of the instrument the Cronbach’s Alpha (α) analysis is conducted. The descriptive results are presented by tables, frequency distributions and percentages to give a condensed picture of the data. Whereas, to determine the relationship among the variables and to test the research hypothesis correlation and regression analysis method are used by meeting the ordinary least square (OLS) assumptions of the linear regression.

3.8. Variables Description

3.8.1. Dependent Variable

There were various numbers of explanatory variables so far identified and have strong bond with the effectiveness of internal audit in the study area. For the purpose of this study and measurability the five explanatory variables are identified. To measure the level of internal audit effectiveness ten questionnaires were constructed and distributed to the respondents. Questioners were adapted from (George, et al., 2015; Hella and Mohamed, 2016). The dependant variable questions on aspects of the internal audit effectiveness including: Internal audit is performed in accordance with the IIA Standards (ISPPIA), Internal audit makes appropriate recommendations for improving the organizational processes, Internal audit evaluate and improves the effectiveness of risk management and governance process, Internal audit assesses that organizational missions are consistent with organizational objectives, Internal audit assesses that risk responses are appropriate and align with the bank’s risk appetite, Internal audit reviews the effectiveness and efficiency of operations and programs, Internal audit communicates timely the engagement results, Internal audit establishes a follow-up process to ensure that corrective actions have been effectively implemented, Internal audit evaluates the potential for the occurrence of fraud and how the organization manages fraud risk, Internal audit reviews the reliability and integrity of financial information.

3.8.2. Independent Variable

There were various numbers of explanatory variables so far identified and have strong bond with the effectiveness of internal audit in the study area. Those predicted variables investigated in this research are: Organizational Setting, Independence and Objectivity, Competency of internal audit staffs, management supports, and Existence of Audit committee. For the purpose of detail investigation and measurability the five explanatory variables were identified and discussed below.

3.8.2.1. Competency of internal audit staffs

It is measured on the dimension of ability of an individual to perform a job or task properly based on the educational level, professional experience, necessary continuous training on time and the effort of the staffs for continuing professional development (George, et al., 2015).

3.8.2.2. Organizational Setting

It is measured on the dimension of the organizational profile, internal organization and budgetary status of the internal audit office; and also the organizational policies and procedures that guide operation of auditees. It provides the context in which internal audit operates (Mihret and Yismaw, 2007).

3.8.2.3. Management support for the internal audit activity

It is measured on the dimension of direct support from the top management, providing of adequate and proper resource for the audit work, assistance from team leader and giving enough training for the audit staff (Hella and Mohamed, 2016).

3.8.2.4. Independence and objectivity of internal auditors

Independence and objectivity are closely related where the freedom from conditions that may threaten objectivity and no significant quality compromises are made during rendering

the audit service. measured on the dimension of Internal audit staff is free from any interference in performing their professional obligations and duties, Internal audit staff does not assess specific operations for which they were previously responsible, Internal audit staff does not perform non-audit functions, and Internal audit staff has free access to all information, departments and employees in the organization (Hella and Mohamed, 2016).

3.8.2.5. Existence of an audit committee

It is measured on the dimension of enhances internal audit independence and the internal audit function report directly to the audit committee not to senior management; the audit committee adopts the internal audit department strategy and plans (Reham, 2013). From the three items were adopted Arena and Azzone (2009) are: independence of audit committee, size of audit committee and committee meetings.

The data for were collected from the head office internal auditors of the all private commercial banks in Ethiopia. Therefore, the dependent and the independent variables represent the perceptions of the internal auditors regarding these concepts.

3.9. Model Specification

There are three types of multiple regressions, each of which is designed to answer a different question: Standard multiple regression is used to evaluate the relationships between a set of independent variables and a dependent variable. Hierarchical, or sequential, regression is used to examine the relationships between a set of independent variables and a dependent variable, after controlling for the effects of some other independent variables on the dependent variable. Stepwise, or statistical, regression is used to identify the subset of independent variables that has the strongest relationship to a dependent variable.

Based on objective of the study standard multiple regression performed to estimate the magnitude of the effect of the five factors, the five independent variables are entered into the regression equation at the same time. Multiple R and R^2 measure the strength of the relationship between the set of independent variables and the dependent variable. An F test is used to determine the relationship can be generalized to the population represented by the sample. A t-

test is used to evaluate the individual relationship between each independent variable and the dependent variable based on the following set of assumptions. If these assumptions hold true, the OLS procedure creates the best possible estimates. In statistics, estimators that produce unbiased estimates that have the smallest variance are referred to as being “efficient.” Efficiency is a statistical concept that compares the quality of the estimates calculated by different procedures while holding the sample size constant.

- 1. Assumption of linearity.** There is a linear relationship between dependent and independent variables.
- 2. Assumption of homoscedasticity.** Data values for dependent and independent variables have equal variances.
- 3. Assumption of absence of collinearity or multicollinearity.** There is no correlation between two or more independent variables.
- 4. Assumption of normal distribution.** The data for the independent variables and dependent variable are normally distributed

Therefore the researcher use ordinary least square regression model to estimate effects of above identified factors (independent variables) on internal audit effectiveness (dependent variable). OLS regression model is as follows:

$$EIA = \alpha + \beta_1 COMP + \beta_2 OrS + \beta_3 EAC + \beta_4 InO + \beta_5 MgS + e$$

Where: EIA = Effectiveness of Internal Audit

α = Constant Term

β_1 to β_5 = Coefficients of independent factors that affect IAE and

COMP = Competency of internal audit staffs

OrS = Organizational Setting

InO = Independence and objectivity of internal auditors

EAC = Existence of an audit committee

MgS = Management Support and

ε = error term

CHAPTER FOUR

4. Results and Discussion

4.1. Introduction

As it is mentioned in the previous chapter, the aim of this study is to analyze the factors affecting internal audit effectiveness of Ethiopian private commercial banks. Hence, this chapter presents the analysis and discussion of research findings obtained from the questionnaires. It reports the investigation results obtained from all internal auditors. The discussion begins with the questionnaires response rate followed by the descriptive statistics of the respondents' related questions, like Qualification, Field of study and Professional certification and Year of experience in internal audit department. The results of the regression assumption test and multiple regression results also reported and finally the results of hypothesis testing are presented.

4.2. Descriptive statistics on demographic variables

4.2.1. Response Rate

Out of the 168 questionnaires were distributed to internal auditors of head office and main branch all private commercial banks and from which 147 questionnaires were collected, giving the response rate of 87.5%. This shows good response rate.

4.2.2. Background of Respondents

Demographic characteristics of the respondents regarding Qualification, Field of study and professional certification and Year of experience in internal audit of the participants are presented in the table 4.1 below. According to the result, educational levels of the respondents' 73.5% have first degree and 25.9% have postgraduate degree only 0.7% have above postgraduate degree. Regarding field of study the respondents' were composed of Accounting 36.1%, Management 23.8%, Marketing /Economics 33.3%, Business Administration 6.1%, and Computer Science 0.7%. Hence, the majority of internal audit teams have studied accounting related fields. This implies that the majority of the internal auditors can perform internal auditing without any gap on the subject area. As indicating in the table, only 3.4% of respondents' have professional certification the rest 96.6% doesn't have any certification. This implies that there is a shortage of

internal audit professionals that fit the current changing environment. Finally respondents experience on internal auditing shows that 13.6% have less than two years experience, 55.8% have two up to five years experience, 21.8% have five up to ten years experience, and 8.8% have above ten years experience. Furthermore, most of the respondents (91.2%) do have less than 10 years experience in auditing. Internal auditors must collectively have the necessary education, professional qualifications, experience and training to be able to add value and improve the organization's operations (Mihret and Woldeyohannis, 2008). This finding indicates that the banks have problems of experienced human resource which contribute to the set back to the effort of strengthening internal audit.

Table 4.1. Background of Respondents

Demographic Questions		Responses		
		Frequency	Percentage	Cumulative %
Educational level	Degree	108	73.5	73.5
	Post graduate	38	25.9	99.3
	Above Post graduate	1	.7	100.0
	Total	147	100.0	
Field of study	Accounting and Finance	53	36.1	36.1
	Management	35	23.8	59.9
	Marketing / Economics	49	33.3	93.2
	Business Administration	9	6.1	99.3
	Computer Science	1	.7	100.0
	Total	147	100.0	
Professional Certification	Certified Internal Auditor	3	2.0	2.0
	Certified Public Accountant	1	.7	2.7
	Other	1	.7	3.4
	Doesn't have Certificate	142	96.6	100.0
	Total	147	100.0	
Year of Experience	Less than two years	20	13.6	13.6
	Above two less than five years	82	55.8	69.4
	Above five less than ten years	32	21.8	91.2
	Above ten years	13	8.8	100.0
	Total	147	100.0	

Source: Survey data (2018)

4.3. Reliability Analysis

To measure the consistency of the questionnaire particularly the Likert-type scale the reliability analysis is essential in reflecting the overall reliability of constructs that it is measuring. To carry out the reliability analysis, Cronbach's Alpha (α) is the most common measure of scale reliability and a value greater than 0.70 is very acceptable (Cohen and Sayag, 2010).

Table 4.2. Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.899	.916	6

Source: Survey data (2018)

From table 4.2 above, the value for Cronbach's Alpha (α) was 0.899 for all variables. If Alpha (α) is greater than 0.7, it means that it has high reliability, then the responses generated for all of the variables' used in this research were reliable enough for data analysis.

4.4. Assessment of Ordinary Least Square Assumptions

The following assumptions must be considered when using multiple regression analysis. The assumptions are met; essentially this means that it is the most accurate estimate of the effect of X on Y (Dan and Sherlock, 2008).

4.4.1. Assessment of Normality

In order to test the normality of data, Kolmogorov-Smirnova and Shapiro-Wilk tests of normality were used and conducted on SPSS 20. According to Field (2009), when the test is non-significant ($p > 0.05$) it shows that the distribution of the sample is not significantly different from a normal distribution. Accordingly, the result of test showed in the table 4.3 that all variables were found to be normal and the presence of normality was accepted at $p > 0.05$.

Table4.3. Test of Normality

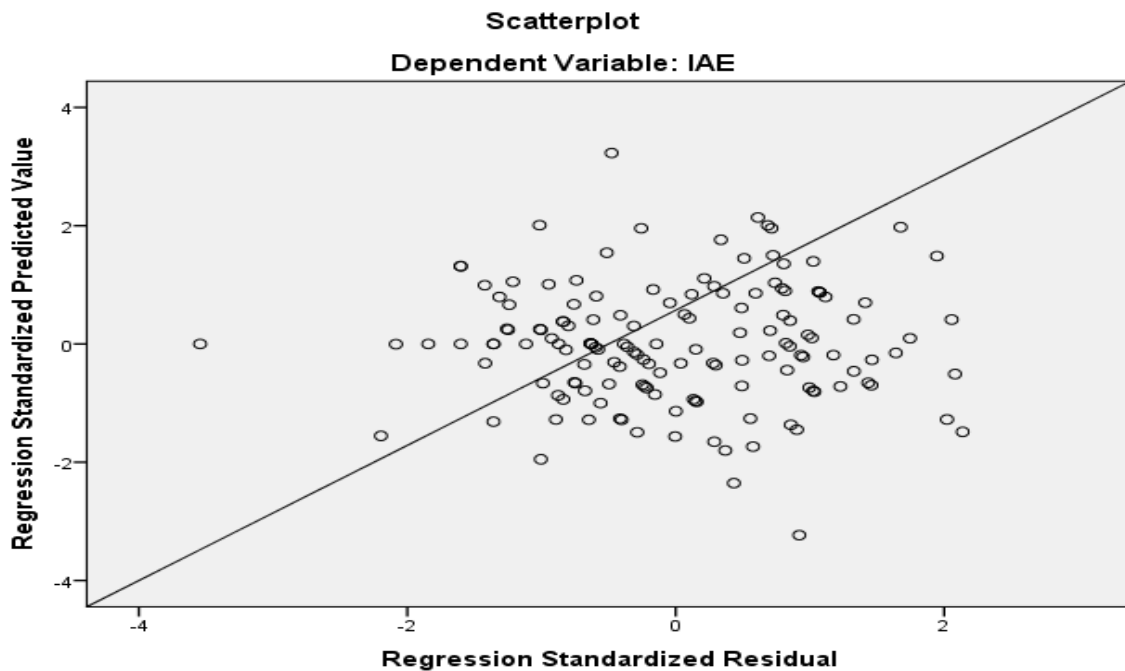
Variables	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Internal Audit Effectiveness	.129	147	.283	.973	147	.104
Organizational Setting	.112	147	.059	.927	147	.138
Independence and Objectivity	.122	147	.105	.968	147	.167
Competency of internal audit staffs	.126	147	.134	.966	147	.232
Management supports	.139	147	.087	.954	147	.141
Existence of Audit committee	.114	147	.162	.972	147	.154

Source: Survey data (2018)

4.4.2. Assessment of Homoscedasticity

This assumption means that the variance around the regression line is the same for all values of the predictor variable (X). A scatterplot of residuals versus value is good way to check for homoscedasticity.

Figure 4.1. Test of Homoscedasticity



Source: Survey data (2018)

Homoscedasticity means “having the same scatter.” assumes that different samples have the same variance, even if they came from different populations. The opposite is Heteroscedasticity “different scatter”, where points are at widely varying distances from the regression line. As figure 4.1 scatterplot shows a violation of this assumption. There is no clear pattern in the distribution. The points are at widely varying distances from the regression line. It is Heteroscedasticity as a result reduces the exactness of the estimates in OLS linear regression.

4.4.3. Assessment of Multicollinearity

The aim of this test is to analyze whether the independent variables are correlated each other. This test is done by analyzing the value of tolerance and variance inflation factor (VIF). Multicollinearity exists when tolerance value below 0.10 and Variance Inflation factor (VIF) greater than 10 in the correlation matrix are the causes for the Multicollinearity existence (Field, 2009; Adhista, 2015). Tolerance is a statistics used to indicate the variability of the specified independent variable that is not explained by the other independent variables in the model. However, the table 4.4 below shows that there is no Multicollinearity between different variables.

Table 4.4. Collinearity Statistics

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Organizational Setting	.581	1.720
Independence and Objectivity	.427	2.344
Competency of internal audit staffs	.338	2.955
Management supports	.340	2.941
Existence of Audit committee	.415	2.407

Source: Survey data (2018)

The value of tolerance from all independent variables are more than 0.1 While, the values of VIF are less than 10. It means that all independent variables are not correlated each other and free from Multicollinearity. In the same way, Multicollinearity exists when there are strong correlations among the predictors and the existence of r value greater than 0.80 (Field, 2009). The

correlation matrix of all the variables have the paired values among the predictors are less than 0.80 see table 4.5 below indicates that there were no Multicollinearity problems that alters the analysis of the findings, rather it leads to the acceptance of r value, tolerance and VIF values.

Table 4.5. Pearson Correlations Matrix

Variables	IAE	OrS	IndO	Comp	MgS	EAC
Internal Audit Effectiveness	1.000					
Organizational Setting	.555	1.000				
Independence and Objectivity	.678	.577	1.000			
Competency of internal audit staffs	.721	.589	.686	1.000		
Management supports	.653	.559	.670	.756	1.000	
Existence of Audit committee	.662	.530	.649	.686	.709	1.000

Source: Survey data (2018)

4.4.4. Assessment of Autocorrelation

Data were assessed to ensure that the autocorrelation is not a threat for the use of OLS for analysis. This assumption can be tested with the Durbin-Watson test which test for serial correlation between errors and the value closer to 2 are acceptable (Field, 2009). In this survey data, SPSS output Durbin-Watson statistics value is 1.756 close to 2 suggests that there is no severe autocorrelation among error terms.

4.5. Regression Results and Hypothesis Testing

The regression result that are obtained by regressing the internal audit effectiveness in adding value for the organization, improving organizational performance and identifying noncompliance activities and the internal auditors ability in adding value for their organization on Organizational Setting, Independence and Objectivity, Competency of internal audit staffs, Management supports, and Existence of Audit committee. Finally, the hypothesis tests were undertaken based on the regression output results.

4.5.1. Regression Analysis Results

The regression analysis was used to examine a dependent variable of internal audit effectiveness explanation by Organizational Setting, Independence and Objectivity, Competency of internal audit staffs, Management supports, and Existence of Audit committee. The result shows, indicators of internal audit effectiveness by using the variables identified in the model. When doing regression analysis the researcher determines whether or not there is a relationship between the attributes and internal audit effectiveness by examining the ANOVA result.

Table 4.6. ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1975.623	5	395.125	44.789	.000 ^b
Residual	1243.887	141	8.822		
Total	3219.510	146			

a. Dependent Variable: IAE

b. Predictors: (Constant), EAC, OrS, IndO, MgS, Comp

Source: Survey data (2018)

If the F statistic is significant, can assume the independent variables taken together have a relationship with the dependent variable. In this study the probability of the F statistic for the regression analysis is .000^b, less than the level of significance of 0.05. Hence, the dependent variable has relationship with the independent variable identified in this study. Generally, it is possible to say the model is a good fit for the variable identified in this study.

Table 4.7. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.783 ^a	.614	.600	2.97017	1.756 ^a

a. Predictors: (Constant), EAC, OrS, IndO, MgS, Comp

Source: Survey data (2018)

The model summary of the study is shown in table 4.7 R statistic represents the strength of the

relationship between internal audit effectiveness and other independent variables. In this study The R square statistic tells us the proportion of variance in the independent variable that is accounted for by the dependent variable. Table 4.7 shows that the adjusted R Square value is 60%. It means that the ability of independent variables to explain the dependent variable is 60%. While, 40% is affected by another factors beyond this research. In other words, the overall contribution of Organizational Setting, Independence and Objectivity, Competency of internal audit staffs, Management supports, and Existence of Audit committee accounted for 60% for the internal audit effectiveness.

Table 4.8. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.528	2.321		2.382	.019
Organizational Setting	.172	.130	.091	1.324	.188
Independence and Objectivity	.435	.149	.234	2.920	.004
Competency of internal audit staffs	.598	.163	.331	3.677	.000
Management supports	.094	.151	.056	.628	.531
Existence of Audit committee	.358	.149	.195	2.402	.018

Source: Survey data (2018)

The contribution of each independent variable in the model, the beta (β) sign also shows the positive or negative effect of the independent variables coefficient over the dependent variable. In this study, beta sign of all the independent variable shows the positive effect on the predicted dependent variable. That means any increase in the independent variable lead to increase in the dependent variable, internal audit effectiveness. Based on the statistical significances of the independent variable over the dependent variable, only three independent variables (Independence and Objectivity; and Competency of internal audit staffs at $P < 0.01$ level of confidence and Existence of Audit committee at $P < 0.05$ level of confidence) are the independent

variables that have significant contribution for internal audit effectiveness. The remaining independent variable Organizational Setting and Management supports have no significant contribution for internal audit effectiveness because they have significance value of greater than $P > 0.05$.

4.5.2. Hypotheses Test

The regression analysis results which are presented in the table 4.8 help the researcher to make accurate test of research hypotheses proposed at the beginning of this study. The hypotheses sought to test for a significant positive association of Organizational Setting, Independence and Objectivity, Competency of internal audit staffs, Management supports, and Existence of Audit committee with internal audit effectiveness. The following hypotheses test were conducted based on the regression results of the internal audit effectiveness obtained from the regression output.

H1: Organizational settings have positive and significant impact on the internal audit effectiveness.

The first hypothesis of this research revealed that there were the direct relationship between the Organizational Setting and the effectiveness of internal audit. This hypothesis were not supported by the regression result as of the regression results insignificant related with the effectiveness of internal audit at ($P < 0.05$). As shown in the table 4.8 the coefficient of Organizational Setting ($\beta = 0.172$) were positively related but statistically ($t = .188$, $\rho > 0.05$) not significant related with the internal audit effectiveness.

Even if this variable have a coefficient of positively related with the effectiveness of internal audit as a result of its insignificant regression analysis output result leads not to support the proposed hypothesis (H1). But this hypothesis needs a caution; in that insignificance of the Organizational Setting in determining the internal audit effectiveness didn't mean that it doesn't completely contribute to the effectiveness of internal audit. This result was consistent with previous study Mihret and Yismaw (2007) organizational setting does not have a strong impact on audit effectiveness. Based on the above results, hypotheses is rejected which indicated that there is no statistically significant relationship between organizational setting and internal audit effectiveness.

H2: Independence and Objectivity have positive and significant impact on the internal audit effectiveness.

The second hypothesis of this research proposed that the effectiveness of the internal audit is directly related with the Independence and Objectivity. The positive beta sign and a statistically significant result of Independence and Objectivity related with the internal audit effectiveness ($\beta = 0.435$, $t = 0.004$, $P < 0.01$). The regression result highly supports this hypothesis at ($P < 0.01$) level of significant. Independence and Objectivity has positive coefficient 0.435 and P value at significant level .004 this means that implementation of Independence and Objectivity of internal audit staffs will have an effect of 43.5% change on internal audit effectiveness.

This result is consistent with Alizadeh (2011) has shown that the organizational independence of the IAF is among the five important factors of the effectiveness of IA in Iranian companies. Furthermore, Cohen and Sayag (2010) found that more organizational independence to the internal auditors plays the vital role in assurance of internal audit effectiveness in the Israeli context. And Hella and Mohamed (2016) who found that independence and objectivity is an important determinant of the effectiveness of internal audit. Zulkifli et al (2014) result of the study there were significant positive relationships between independence and objectivity, and the effectiveness of internal audit in the Malaysian public sector. Arena and Azzone (2009) revealed that IA effectiveness increases when the CAE is affiliated to the IIA. In fact, internal auditors' members of the IIA are objective and they can manage conflicts between the loyalty of the profession and the organization's requirements. Based on the above results, hypotheses is accepted which indicated that there is statistically significant relationship between independence and objectivity and internal audit effectiveness. The second hypothesis is thus confirmed.

H3: Competences of the internal auditors have positive and significant impact on the internal audit effectiveness.

The third hypothesis of this research proposed that the effectiveness of the internal audit is directly related with the Competences of the internal auditors. The positive beta sign and a statistically significant result of Competences of the internal auditors related with the internal

audit effectiveness ($\beta = 0.598$, $t = 0.000$, $P < 0.01$). The regression result highly supports this hypothesis at ($P < 0.01$) level of significant. Competences of the internal auditors has positive coefficient 0.598 and P value at significant level .000 this means upgrading in Competency of internal audit staffs will have an effect of 59.8% change on internal audit effectiveness. From the above results the hypothesis that is the positive relationship between competency of internal auditors and internal audit effectiveness.

Previous studies suggest that competence of internal auditors is a critical determinant of IA Effectiveness. This result is consistence with some previous researchers (Mihert and Yismaw, 2007; George et al., 2015) they found that competency of internal auditors have positive relationship with internal audit effectiveness. Based on the above results, hypotheses is accepted which indicated that there is statistically significant relationship between Competency of internal audit staffs and internal audit effectiveness. The third hypothesis is thus confirmed.

H4: Management supports have positive and significant impact on the internal audit effectiveness.

The forth hypothesis of this research revealed that there were the direct relationship between the Management support and the effectiveness of internal audit. This hypothesis were not supported by the regression result as per the regression results insignificant related with the effectiveness of internal audit at ($P < 0.05$). As shown in the above table the coefficient of Management support ($\beta = 0.094$) were positively related but statistically ($t = .531$, $\rho > 0.05$) not significant related with the internal audit effectiveness. Even if this variable have a coefficient of positively related with the effectiveness of internal audit as a result of its insignificant regression analysis output result leads not to support the proposed hypothesis (H4). But insignificance of the Management support in determining the internal audit effectiveness didn't mean that it doesn't completely contribute to the effectiveness of internal audit.

It may even be that all the other determinants of IA effectiveness derive from the support of top management, given that hiring proficient IA staff, developing career channels for IA staff, and providing organizational independence for IA work are all results of decisions made by top management (Zulkifli et al., 2014). This finding inconsistent with previous studies, most of the

literatures mentioned in this paper identified that management support as a crucial factor for internal audit effectiveness (Cohen and Sayag, 2010; Georg et al, 2015; Shewamene, 2014; Mihret and Yismaw, 2007). Based on the above results, hypotheses is failed to accept which indicated that there is no statistically significant relationship between management support and internal audit effectiveness.

H5: Existences of Audit committees have positive and significant impact on the internal audit effectiveness.

The last hypothesis which is proposed to support the effectiveness of internal audit is the Existence of Audit committee. The regression output result also supports this hypothesis with significantly correlated variables with the level of significance ($p < .05$) and positively related coefficients ($\beta = .358$ and $t = 0.018$) contributes for the internal audit effectiveness. Existence of Audit committee has positive coefficient 0.358 and P value at significant level 0.018 this means Audit committee involvement on internal audit activities will have an effect of 35.8% change on internal audit effectiveness. From the above results the hypothesis that is the positive relationship between Existence of Audit committee and internal audit effectiveness. The results show a positive and significant association between the relationship between Existence of Audit committee with internal audit effectiveness with $p < 05$ (supporting H5), suggesting that higher internal audit effectiveness is associated with Existence of Audit committee.

This result is consistent with the research done by Arena and Azzone (2009) the results also imply that internal audit effectiveness increases when audit committee is involved in the internal auditor's activities. Riham (2013) audit committees can be viewed as a key safeguard mechanism for internal auditors in managing their professional objectivity. Seif (2017) the result of the study confirmed the prior IA effectiveness research, where this study found a strong relationship between Audit Committee and effectiveness of IA. Based on the above results, hypotheses is accepted which indicated that there is statistically significant relationship between Existence of Audit committee and internal audit effectiveness. The fifth hypothesis is thus confirmed.

The findings from this research were supported by the earlier studies such as Zulkifli (2014);

George et al. (2015); Alzeban and Gwilliam (2014) the Competency of internal auditors is concern. These researchers found that internal auditors can effectively carry out their duties if there are enough internal auditors possessed the required competencies. As for the Independence of the internal auditors, previous studies such as George et al. (2015); Alzeban and Gwilliam (2014) and Zulkifli (2014) support this study's findings. Cohen and Sayag (2010) found that 'Greater organizational independence will be related to auditing effectiveness.' Meanwhile, Zulkifli (2014) supports the statement that independence and objectivity are closely related to internal audit effectiveness. Mu'azu (2014) did a study on the audit committee to give empirical evidence about the influence of audit committee on internal audit. Riham (2013) audit committees can be viewed as a key safeguard mechanism for internal auditors in managing their professional objectivity. Winston and George (2016); Seif (2017) support this study's findings, concluded that there was a significant statistical relationship between audit committee and effectiveness of the internal audit. However, management support to internal auditors no statistically significant relationship between and internal audit effectiveness. Zulkifli (2014) and Cohen and Sayag (2010) found that management support is most crucial to the operation and success of internal audit. George et al. (2015) and Alzeban and Gwilliam (2014) also argued that there is positive associated between management supports and internal audit effectiveness different findings with this study. Medanit (2016); Hawa (2016) found that organization setting do have an impact on the effectiveness of internal audit different findings with this study. Mihret and Yismaw (2007) organizational setting does not have a strong impact on audit effectiveness similar findings with this study.

CHAPTER FIVE

5. Conclusions and Recommendations

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

5.1. Summary of Major Finding

In line with the objective of this research to assess the factors affecting internal audit effectiveness of Ethiopian private commercial banks, the researcher has adapted questionnaires to gather primary data from internal auditors of all private commercial banks. The collected data from the respondents was analyzed using SPSS version 20.

According to the output ability of independent variables to explain the dependent variable is 60%. Thus, the result of this study confirmed the prior internal audit effectiveness research, where this study found a strong relationship between Competences of the internal auditors was found a important factor have influence on internal audit effectiveness, this result confirmed before by (Mihert and Yismaw, 2007; George et al., 2015). This study found also a very strong positive linkage between Independence and Objectivity and internal audit effectiveness, as found by previous research (Cohen and Sayag, 2010; Hella and Mohamed, 2016; Zulkifli et al., 2014). This study also confirmed, as reported by studies in the past (Zhang et al. (2007); Arena and Azzone (2009); George et al. (2015); Riham (2013); Seif, (2017) here is a linkage between audit committee and the effectiveness of internal audit, found a positive and significant relation between this factors. However, the Organizational Setting and the Management support were not significant effect, but they have a positive sign of beta and contribute for the 60% of the variances for the internal audit effectiveness. Thus, neglecting these two variables may cause to decrease the value of internal audit effectiveness variance that was obtained from collective contribution of the five independent variables. The overall effect of this variable is very important for the internal audit effectiveness. Therefore, the private commercial banks should give emphasis to use these determinant variables to make their internal audit effective, efficient and economical. Moreover the Independence and objectivity of internal auditors,

Competency of internal audit staffs, Existence of audit committees were the major factors that have an effect on internal audit effectiveness.

5.2. Conclusions

Internal audit play important role in an organization success, the existence of effective internal audit is critical. Organizations with effective and efficient internal audit function are able to detect fraud more than those that have not such a function within their organizations. By taking this aspect into consideration, this study was identified factors that determine the internal audit effectiveness in the private commercial banks in Ethiopia and then analyzed should carry out to enhance the internal audit effectiveness. And also by testing of the proposed hypotheses showed relations of these independent variables with the internal audit effectiveness the following conclusions were drawn.

- The majority of the respondents (96.6%) Doesn't have Professional Certification and (91.2%) do have less than 10 years experience in auditing. With all these fact, it can be assumed that internal auditors have relatively still lack of Professional qualified and experienced auditors.
- In recent years there is growing recognition of the important role of internal auditing in business risk management in organizations. This study focuses on factors affecting internal audit effectiveness. To analyze the effect of Organizational Setting, Independence and Objectivity, Competency of internal audit staffs, Management supports, and Existence of Audit committee on the internal audit effectiveness. The result of this study confirmed the prior IA effectiveness research. The result showed that Competency of internal audit staffs, Independence and Objectivity, Existence of Audit committees have significant and positive effect on the internal audit effectiveness. While Organizational Setting and Management supports have no significant effect in the internal audit effectiveness. The ability of independent variables to explain the dependent variable is 60 %. The Internal Audit effectiveness of the organization increases, when there were the Competency of internal audit staffs, implementation of Independence and Objectivity internal auditors and Existence of Audit committee.

5.3. Recommendations

As per the findings from the analysis of the collected data; the following recommendations are forwarded in order to achieve internal audit effectiveness

- The management consider internal audit staff experience has become one of the factor to be consider when it comes to internal audit effectiveness issues, because it enable the achievement of good quality auditing and thereby leads to the provision of good recommendation.
- The findings of this study Competency of internal audit staffs have a positive and significant effect on internal audit effectiveness. Therefore, the competencies internal audit staffs need to collectively possess and develop their knowledge or skills through appropriate training and development program such as obtaining professional certification.
- This study found that Independence and Objectivity have a positive and significant effect on internal audit effectiveness. In order to ensure the appropriate level of independence and objectivity of the internal audit, professional standards and guidance of ISPPIA suggest that the audit reports administratively to the senior management and functionally to the board. Auditors should be independent in performing their duties and should not be restricted from access to certain files.
- The study indicates a significant positive relationship between Existence of audit committee and internal audit effectiveness. The banks management should emphasize on the role of audit committees because of a key safeguard mechanism for internal auditors in managing their professional objectivity (Riham, 2013).
- This study result Management support was not significant effect. However, Most the previous research conformed Management support is the most influencing factor among the factors that contribute to the variation of quality audit work and this obviously crucial factor to the effective IA function. In fact, the management support is important to the success of the internal audit function in the organization. Without support from top management, internal auditing is not sufficiently objective and independent, has not enough resources to effectively fulfill its works. Furthermore, internal auditors cannot develop their professional careers.

5.4. Suggestions for Future Research

This study has methodological limitations. It is questionnaire-based, and a measure of the variables, both the dependent and independent variable, is established according to the perceptions of the internal auditors. Future studies are called to extend this study by examining the influence of other factors on the internal audit effectiveness. This may provide new insights of the possible factors that could influence this effectiveness such as Size of Internal Audit Department; Internal Auditors Experience; Relationship between Internal and External Auditors.

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Appendix A: Questionnaires



School of Graduate Studies Department of Accounting and Finance Questionnaire

Dear Participant:

The objective of this questionnaire is to explore information regarding factors affecting internal audit effectiveness the research is conducting for the partial fulfillment of Master of Business Administration in Accounting and Finance at St. Mary University. The questioners will be distributed to all Private Commercial Banks in Ethiopia Internal audit staff at Head office.

The results of the study are expected to contribute to identify the factors affecting internal audit effectiveness. Therefore your honest and genuine participation by responding to the questions is highly appreciated. Your answers are completely confidential. Your name will not be written on this form, will never be used in connection with any of the information you tell me.

Thank you in advance for your support and participation

With best regards,

Wondwosen Solomon
Cell phone No.0913604812
Email: Wondwosen66@gmail.com

Part I: - General Information

Instructions: Please tick (√) from the alternatives that are most applicable answer to you in respect of each of the following items

1. Qualification (Educational background)

College Diploma Masters
 Bachelor's Degree Above Master
 Other Specify _____

2. Field of study on your highest educational level:

Accounting and Finance Marketing / Economics
 Management Business Administration
 Other Specify _____

3. Professional certification (if any):

Certified Internal Auditor (CIA) Certified Public Accountant (CPA)
 Certified Management Accountant (CMA) other (specify) _____

4. Year of experience in internal audit department

less than two years Above five less than ten years
 Above two less than five years Above ten years

Part II: - Internal Audit Questions

The Questionnaire is prepared in Likert-scale form with five (5) point scales. I ask you to tick(√) that indicates your opinion in table below. The values of scales are **5= Strongly agree (SA)**, **4= Agree (A)**, **3= Neutral (N)**, **2= Disagree (D)**, **1= Strongly Disagree (SD)**

S/No		SA (5)	A (4)	N (3)	D (2)	SD (1)
Organizational Setting of Internal Audit						
1	The internal audit function of the bank given a sufficiently high status in the organizational structure.					
2	Internal audit department has adequate budget given the amount of auditing work planned.					
3	There is a complete internal audit policies and procedures to guide internal audit work.					
4	The bank use sound established criteria to evaluate auditees' practices.					
5	The internal audit department is large enough to successfully carry out its duties.					

S/No		SA (5)	A (4)	N (3)	D (2)	SD (1)
Independence and objectivity of internal audit						
1	Internal audit staff is sufficiently independent in performing their professional obligations and duties					
2	Internal audit staff does not assess specific operations for which they were previously responsible					
3	Internal audit staff has free access to all information, departments and employees in the organization					
4	Internal auditors feel free to include any audit finding in their audit work and directly report to responsible body					
5	Internal audit provides reports to the board of directors (audit committee)					
Competency of Internal Audit staffs						
1	Internal auditors have a deep professional knowledge on the overall activities of the department.					
2	The bank audit department or division has progressed in terms of appropriately qualified or professional staff.					
3	Internal auditors are proactive (controlling a situation rather than just responding).					
4	Internal auditors attend educational seminars for continuous training					
5	There is communication between internal auditors and auditees					
Management support of Internal Audit						
1	Management take timely corrective action based on internal audit recommendations					
2	Senior management is aware of internal audit's needs/ basic resources/					
3	Internal audit department has sufficient staff to successfully carry out its responsibilities					
4	Senior management provides sufficient support and encouragement for training and developing the internal audit staff.					
5	There is management commitment to strengthen internal audit division					
Existence of Audit Committee						
1	The audit committee adopts the internal audit department strategy and plans					
2	The chief audit executive actively involved with the audit committee					
3	The audit committee reviews the internal auditors' reports and take immediate action					
4	The existence of audit committee enhances internal audit independence					
5	The audit committee report to the board of directors that allows the internal audit to achieve its responsibilities.					

S/No		SA (5)	A (4)	N (3)	D (2)	SD (1)
Internal Audit Effectiveness						
1	Internal audit is performed in accordance with the IIA Standards (ISPPIA)					
2	Internal audit makes appropriate recommendations for improving the organizational processes					
3	Internal audit evaluate and improves the effectiveness of risk management and governance process					
4	Internal audit assesses that organizational missions are consistent with organizational objectives					
5	Internal audit assesses that risk responses are appropriate and align with the bank's risk appetite.					
6	Internal audit reviews the effectiveness and efficiency of operations and programs					
7	Internal audit communicates timely the engagement results					
8	Internal audit establishes a follow-up process to ensure that corrective actions have been effectively implemented					
9	Internal audit evaluates the potential for the occurrence of fraud and how the organization manages fraud risk					
10	Internal audit reviews the reliability and integrity of financial information					

Please suggest if you face any kind of idea in evaluation of internal audit effectiveness in your bank that is not addressed in this questionnaire.

Thank you for your support and participation

Appendix B: Reliability Statistics for Variables

I. Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.899	.916	6

Source: Survey data (2018)

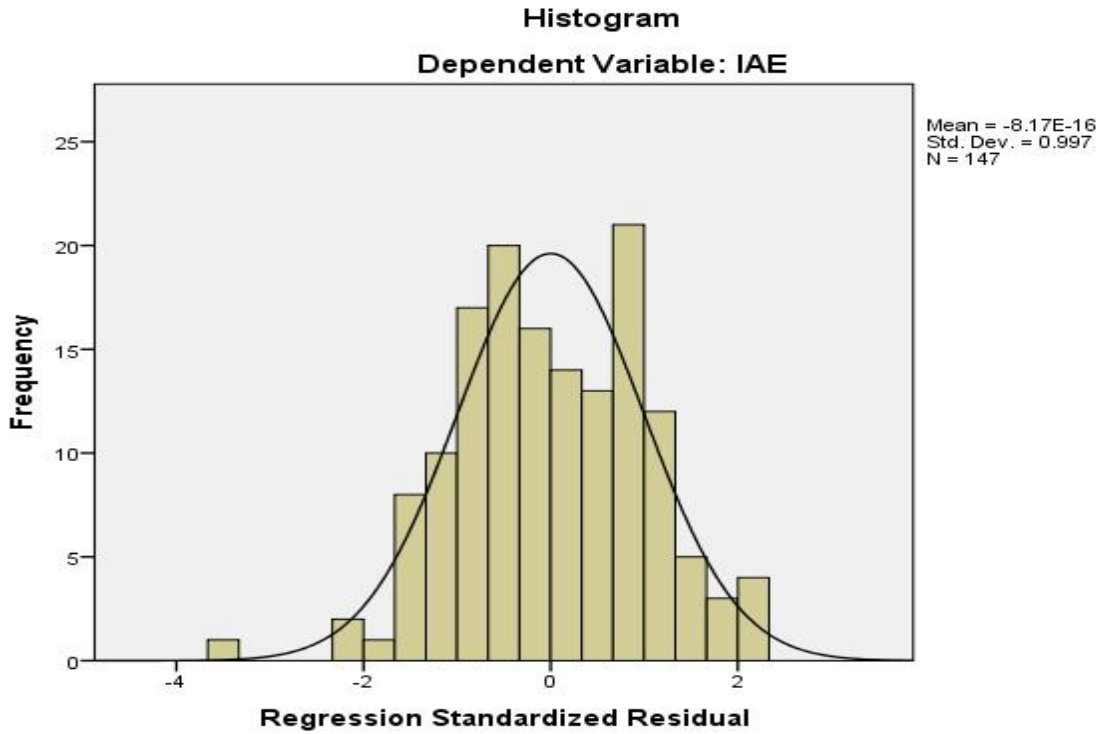
II. Assessment of Ordinary Least Square Assumptions

Test of Normality

Variables	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Internal Audit Effectiveness	.129	147	.283	.973	147	.104
Organizational Setting	.112	147	.059	.927	147	.138
Independence and Objectivity	.122	147	.105	.968	147	.167
Competency of internal audit staffs	.126	147	.134	.966	147	.232
Management supports	.139	147	.087	.954	147	.141
Existence of Audit committee	.114	147	.162	.972	147	.154

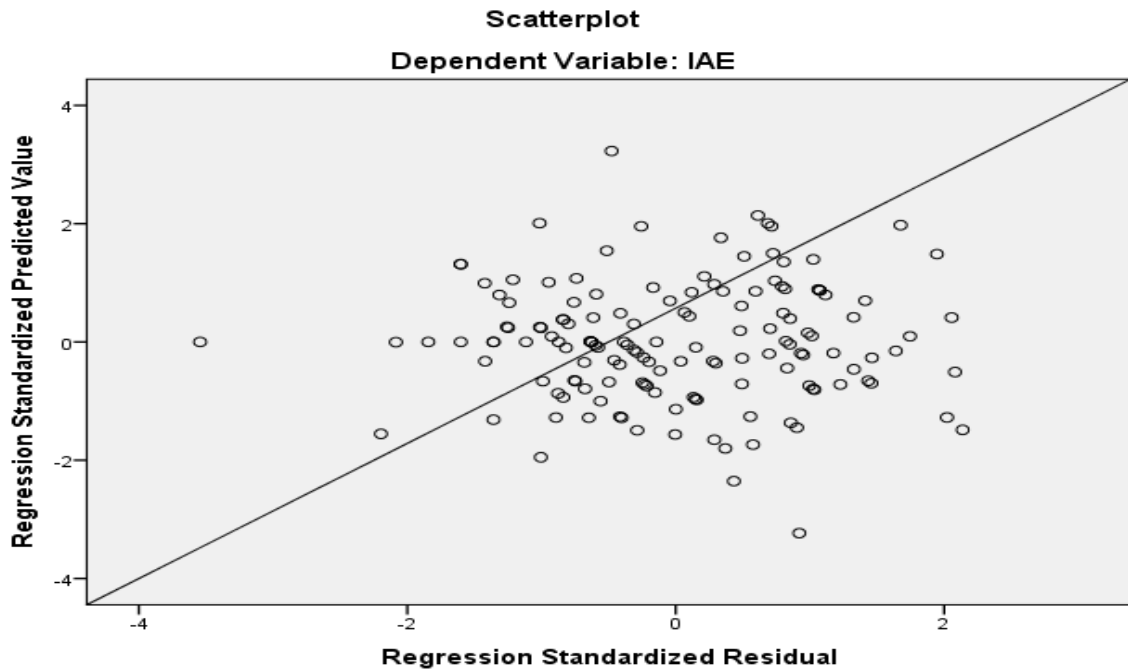
a. Lilliefors Significance Correction

Source: Survey data (2018)



Source: Survey data (2018)

Assessment of Homoscedasticity



Source: Survey data (2018)

Assessment of Multicollinearity

Pearson Correlations Matrix

Variables	IAE	OrS	IndO	Comp	MgS	EAC
Internal Audit Effectiveness	1.000					
Organizational Setting	.555	1.000				
Independence and Objectivity	.678	.577	1.000			
Competency of internal audit staffs	.721	.589	.686	1.000		
Management supports	.653	.559	.670	.756	1.000	
Existence of Audit committee	.662	.530	.649	.686	.709	1.000

Source: Survey data (2018)

III. Regression Results

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1975.623	5	395.125	44.789	.000 ^b
Residual	1243.887	141	8.822		
Total	3219.510	146			

a. Dependent Variable: IAE

b. Predictors: (Constant), EAC, OrS, IndO, MgS, Comp

Source: Survey data (2018)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.783 ^a	.614	.600	2.97017	1.756 ^a

a. Predictors: (Constant), EAC, OrS, IndO, MgS, Comp

Source: Survey data (2018)

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	5.528	2.321		2.382	.019		
	OrS	.172	.130	.091	1.324	.188	.581	1.720
	IndO	.435	.149	.234	2.920	.004	.427	2.344
	Comp	.598	.163	.331	3.677	.000	.338	2.955
	MgS	.094	.151	.056	.628	.531	.340	2.941
	EAC	.358	.149	.195	2.402	.018	.415	2.407

Source: Survey data (2018)

Scatterplot

Dependent Variable: IAE

