



**FACTORS AFFECTING INTERNAL AUDIT EFFECTIVENESS:  
A CASE OF COMMERCIAL BANK OF ETHIOPIA  
ADDIS ABABA BRANCH OFFICES**

**BY: MEDHANIT AMARE**

**SGS/0116/2007A**

**June, 2016**

**Addis Ababa, Ethiopia**

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**A THESIS SUBMITTED TO ST.MARY'S UNIVERSITY, SCHOOL OF  
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**June, 2016**

**ADDIS ABABA, ETHIOPIA**

**ST. MARY'S UNIVERSITY  
SCHOOL OF GRADUATE STUDIES  
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## **DECLARATION**

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Abebaw Kassie (PhD). All sources of material used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institutions for the purpose of earning any degree.

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Name

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Signature

**June, 2016**

## ENDORSEMENT

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

Abebaw Kassie (PhD)

Advisor

St. Mary's University, Addis Ababa

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Signature

June, 2016

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## ACRONYMS AND ABBREVIATIONS

<b>CBE</b>	Commercial Bank of Ethiopia
<b>COM</b>	Competency
<b>IA</b>	Internal Auditors
<b>IAE</b>	Internal audit effectiveness
<b>IIA</b>	Institute of internal auditors
<b>MOFEC</b>	Ministry of finance and Economic Corporation
<b>MS</b>	Management Support
<b>OIN</b>	Organizational Independence
<b>OLS</b>	Ordinary Least Square
<b>OS</b>	Organizational Setting
<b>SPSS</b>	Statistical Package for Social Science

## **ABSTRACT**

*The main purpose of this study is to investigate the determinants of internal audit effectiveness in the Commercial Bank of Ethiopia. The research design is focused on 15 selected Grade 4 branch offices that are expected to represent all other branches. The management teams and the internal auditors of the branch offices are the source for the required data to the researcher through the questionnaires administered. Census method was used to conduct the research. Data was then analyzed on quantitative basis using descriptive statistics, Pearson's correlation and linear regression analysis. The finding of this study is to show the direct relation effects of auditors' competency, organizational independence, management support and organizational setting on the bank. The result showed that there is no statistical significance negative relationship between competency, management support and internal audit effectiveness. Besides the result showed that there is no statistical significance weak positive relationship among organizational setting and internal audit effectiveness. The researcher found that there is strong significant positive relationship between organizational independence and internal audit effectiveness. All of these four independent variables are making 34.5% of the contributions for internal audit effectiveness in the Commercial Bank of Ethiopia branch offices. The Commercial Bank of Ethiopia board of directors 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 IAE in the Commercial Bank of Ethiopia.*

**Key Words:** *Internal Audit; internal audit effectiveness; determinants of internal audit effectiveness; Commercial Bank of Ethiopia;*

# 1. CHAPTER ONE

## 1.1 Back ground and Justification

Internal auditing (IA) serves as an important link in the business and financial reporting processes of corporations and not-for-profit providers (Reynolds 2000). Internal auditors play a key role in monitoring a company's risk profile and identifying areas to improve risk management (Goodwin-Stewart and Kent 2006). The aim of internal auditing is to improve organizational efficiency and effectiveness through constructive criticism. IA has four main components: (1) verification of written records; (2) analysis of policy; (3) evaluation of the logic and completeness of procedures, internal services and staffing to assure they are efficient and appropriate for the organization's policies; and (4) reporting recommendations for improvements to management (Eden and Moriah 1996).

The compliance with statutory and professional requirements is vested with auditors. Auditors are not implying that financial statements are free from bias or they have been verified. The role of auditors was to examine the reasonableness of management's justifications for its representations. The concern now is whether the true and fair view is the message that auditors are trying to convey (Ramazanoglu and Holland, 2002).

An effective internal audit function will add value and improve an organization's operations. Oxford Dictionary defines effective as having an effect or able to bring about the result intended. Dittenhofer (2001) and Omar, et al. (2007) defined effectiveness as the achievement of the objectives and goals. Beckmerhagen, et al. (2004) stated that in order to adequately measure audit effectiveness, evaluation must not done only on results of the audit against the planned objectives, but also the audit process (planning, execution to reporting and follow-up) and resources (auditor independence and competence).

Banking is a service area that needs special quality parameters to serve the need of customer utmost. It is the most vital economic sector that provides services in order to meet important needs of society at large. Therefore, the ability of banks to continue and survive in the market depends on their ability to respond to the requirements of change and interact with the output of it

as the customers' needs and wishes which are also shaped and formed in the light of their economic, social and civilization conditions.

Objective of this study is to investigate factors affecting internal audit effectiveness of internal audit in Commercial Bank of Ethiopia (CBE). This study contributes to internal audit quality literature by providing empirical evidence that increase the body of knowledge in understanding the factors that influence the internal audit effectiveness. Furthermore the study used to understand factors determining the internal audit effectiveness in Commercial Bank of Ethiopia.

## **1.2. Statement of the problem**

The internal control system is the major part in any organization. The role of IA unit is to determine that internal control is in place by reviewing policies and practices in the organization in order to avoid loss of financial resources, noncompliance and also to provide reasonable assurance that public money has been spent in an efficient and effective manner (Sri Lanka Auditing Standard 315, ICASL).

As competition in banking sector is high, effective internal audit has become an important issue for managers who look to improve the level of their bank. Investigating the internal audit effectiveness is expected to help managers to improve the level of effective audit provided by the internal auditing and to find the most appropriate conditions that lead to high levels of audit quality (Gibbs and Schroeder 1980). Practical work and experience in the effective audit of banks sector can help in connecting the theoretical ideas with the real practice.

On their literature review, Dessalegn et al (2009) indicated that internal audit effectiveness is influenced by the dynamics prevailing in IA settings. They also argued that as IA is aimed to assist organizations to achieve objectives, a positive association between internal audit's level of compliance with the standards for professional practice of internal auditors and with organizational performance could serve as an additional approach to assess IA effectiveness.

More over Internal audit quality is examined as one of the variables associated with internal audit effectiveness by Mihret and Yismaw (2007).Cohen and Sayag (2010) considered the quality of internal audit work as a factor of internal audit effectiveness and professional proficiency of internal auditors is one of major importance for effective internal auditing. Internal audit team is

also mentioned by Arena and Azzone (2009) as a factor affecting internal audit effectiveness. Furthermore Arena and Azzone, (2009) noted that effectiveness of internal audit function is influenced by resources and competencies of an IA team, activities and processes performed and organizational role. Along with this, Mihret et al. (2010) indicate that both the technical competence and continuous training of internal audit team are essential requirements for internal audit effectiveness.

One of the most important factors affecting internal audit effectiveness according to the literature is the support by top management. Mihret and Yismaw (2007) argued that there is a positive relationship between top management support and internal audit effectiveness. In line with the above study, management support is also considered as the main determinant of internal audit effectiveness according to Cohen and Sayag (2010).

Cohen and Sayag (2010) also argue that organizational independence of internal audit affects internal audit effectiveness. Examining effectiveness of internal audit in Saudi Arabia Alzeban and Gwilliam (2014) argue that independence of internal audit (along with “competence of internal audit department”, “size of internal audit department”, “relationship between internal and external auditors”, “management support”) is positively associated with internal audit effectiveness.

As cited by George et al (2015) there is great importance to identify the factors affecting internal audit in order to be effective. Previous studies have used different approaches to investigate internal audit effectiveness, as effective internal audit is influenced by series of factors. Moreover, factors and measurement of internal audit’s effectiveness have been used differently by the researchers (Arena and Azzone, 2009) and until now, there is no consensus regarding the most appropriate framework for internal audit’s effectiveness (Endaya and Hanefah, 2013). Thus, effectiveness of internal audit is a dynamic process and a matter of considerable debate. Despite such a gap, no study has been done to assess determinants of internal control effectiveness of the Commercial Bank of Ethiopia. To achieve the research objective and to test the research questions it is the above mentioned evidence that motivated the researcher to assess what factors that contributes to the effectiveness of IA in order to perform their duties effectively practiced in Commercial Bank of Ethiopia. Factors such as internal auditor’s competency, independence of internal auditors, organization setting and management support in CBE are examined and answered.

### **1.3. Research Questions**

The research has proposed to answer the following questions.

- What are the factors affecting internal audit effectiveness in CBE
- Does organizational independence of internal auditors affect internal audit effectiveness
- Does auditors competency impacts on internal audit effectiveness
- Does the support given by management to internal auditors enhance the internal audit effectiveness
- Does organizational setting affect internal audit effectiveness

### **1.4. Objective of the Study**

#### **1.4.1 General Objective**

The general objective of the study is to asses factors that affect internal audit effectiveness on Commercial Bank of Ethiopia.

#### **1.4.2. Specific objectives of the study**

- To examine effect of Internal Auditor's Competency for effective internal audit on Commercial Bank of Ethiopia.
- To examine effect of organizational independence of internal auditors for effective internal audit on Commercial Bank of Ethiopia.
- To examine the contribution of management support for effective internal audit on Commercial Bank of Ethiopia.
- To examine how does organization setting influence internal audit effectiveness on Commercial bank of Ethiopia?

### **1.5. Scope of the Study**

The scope of this study covers the internal auditors that work in commercial banks. This research wills emphasis on the effectiveness of internal control systems in commercial banks. Every research endeavor has its own delimitation that limits the application of conclusions to be drawn from the analysis and makes it manageable given various constraints. However, to make the



research manageable, mainly due to shortage of time and fund, resource constraints, it is limited on analysis focused on Commercial Bank of Ethiopia which mainly focuses on the determinants of internal audit effectiveness for the year 2015.

### **1.6. Significance of the Study**

The study explored on the factors affecting the effectiveness of internal audit taking Commercial Bank of Ethiopia as a case study. The results of this study are expected to be significant to various aspects. This study contributes to determinants of internal audit effectiveness that will enable the commercial bank of Ethiopia managements to correct the operational problem faced. More over the findings of the study will support to identify gaps in the systems of internal control in the commercial banks. Furthermore, this study serves as a reference for other researchers who are interested in conducting studies on this issue.

### **1.7. Limitation of the Study**

Like any other study, this study has its own limitations. The major limitation is some of respondents do not offer as per the researcher expected time was the main problem face in the study process. Moreover, shortage of latest reference books and literature on the area in Ethiopia content was narrowed the study output. Lastly in general the most important factor that limited the study output was shortage of time, and due to this the Commercial Bank of Ethiopia branch offices which are cover under this research work are limited to 15 Grade 4 branch offices which are expected to show the effects of all the rest untouched offices.

### **1.8. Organization of Study**

The research paper consists of five chapters. Chapter one contains background of the study, statement of the problem, objective of the study, significance of the study, scope of the study, and organization back ground. Chapter two deals with theoretical and empirical literature review to provide background information what is already known about the matter under study. Chapter three describes research design and methodology part presents the study population, sample size, sampling techniques, methods of data analysis. Chapter four interprets and discusses presentation,

analysis, and interpretation of data. Finally the last chapter includes the conclusions and recommendations.

## **2. CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1. Introduction**

The bases of safe and sound banking system of the effective internal controls are so important. A system of tough internal controls can support to ensure that the goals and objectives of banks will be met, that the bank will help to attain long-term profitability targets, and maintain reliable financial and managerial reporting. Such a system can also help to ensure that the bank will comply with laws and regulations as well as policies, plans, internal rules and procedures and decrease the risk of unexpected losses or damage to the bank's reputation. Therefore, the effectiveness of IA should receive the greater attention in research area to enhance the quality of its report. In line with this, the research had focused on the determinants of IA effectiveness in Commercial Bank of Ethiopia.

#### **2.2. Theoretical Review Internal Audit and Related Literature**

Historically, internal audit has been considered as a monitoring function, the "organizational policeman and watchdog" (Morgan, 1979), tolerated as a necessary component of organizational control but deemed subservient to the achievement of major corporate objectives. However, Institute of Internal Auditors, (IIA, 1991; Taylor and Glezen, 1991; Konrath, 1996) defines internal auditing as "an independent appraisal function, established within an organization to examine and evaluate its activities as a service to the organization". By measuring and evaluating the effectiveness of organizational controls, internal auditing, itself, is an important managerial control device (Carmichael et al., 1996), which is directly linked to the organizational structure and the general rules of the business (Cai, 1997). In this period, internal audit is defined also by COSO (Committee of Sponsoring Organizations of the Tread way Commission, 1992) as a procedure which offers fundamental security to the business concerning the credibility of financial affairs. The report defines internal control and describes a framework for internal control. However, the crucial difference of this report is that it also provides criteria for the management to utilize so as to evaluate controls (Aldridge and Colbert, 1994).

Various authors and scholars defined auditing in different ways; “Standards for the Professional Practice of Internal Auditing”, which was issued by The Institute of Internal Auditor, the definition of internal auditing is: “Internal auditing is an independent evaluation function in an organization; it examines and evaluates an organization activity, and provides services to the organization. The Institute of Internal Auditors (IIA, 1999) 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”.

Hence, a comprehensive definition is given by Sawyer (2004) who stated that internal auditing is “a systematic, objective appraisal by internal auditors of the diverse operations and controls within an organization to determine whether (1) financial and operating information is accurate and reliable, (2) risks to the enterprise are identified and minimized, (3) external regulations and acceptable internal policies and procedures are followed, (4) satisfactory operating criteria are met, (5) resources are used efficiently and economically and (6) the organization ’s objectives are effectively achieved all for the purpose of consulting with management and for assisting members of the organization in the effective discharge of their governance responsibilities”.

### **2.3. Internal Audit Effectiveness**

The Institute of Internal Auditors (IIA, 1999) 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”. According to the literature, it is argued that internal audit contributes to organization’s compliance with applicable laws and regulations. The word “effectiveness” have been defined by different researchers, for instance Arena and Azzone (2009) defined effectiveness “as the capacity to obtain results that are consistent with targets objective,” while, Dittenhofer (2001) view effectiveness as the ability toward the achievement of the objectives and goals. In the same context, a program can be seen as effective if its outcome goes along with its objectives (Ahmad et al, 2009; Mihret et al, 2010). A good set of control would encourage efficient and effective use of company resources (Arenset.al. 2008).

## **2.4. Empirical Review**

Many studies have been conducted on determinants of internal audit effectiveness by many researchers. For the case of presenting study the literature regarding to the main factors that affect the internal audit effectiveness in Commercial Bank of Ethiopia such as internal auditor's Competency, organizational independence of internal auditors, management support, and organization setting reviewed from different researchers are included in these literature.

## **2.5. Factors affecting internal audit effectiveness**

Miheret and Yismaw (2007) have found in their study, using a model, which assumes that there is a common interest to achieve organizational goals for audit management, top management and internal audit, is used for analysis of this case study. Up on these findings internal audit office of organization has low technical staff proficiency, high staff turnover, does not prepare strategic plan and management support significantly influence audit effectiveness in the organization studied. Hung and Han (2010) by using multiple regressions management's perceiving effectiveness are management's attitude, controller's attitude, the probability of internal auditors' promotion, the implementation of performance evaluation, the establishment of job description, and the training and professional abilities of internal auditor.

Another research method Modibbo (2015) based on scientific sampling technique, selecting 200 staff of the three operational departments where both internal auditors and auditees were answered has shown internal audit effectiveness. The analysis showed that factors that affect internal audit are lack of independence and short of adequate staff; they are not timely in their internal audit reporting. In addition to that the components of internal control system are not properly put in place by the management of the institutions, especially in the area of authorization and approval, supervision, segregation of duties and personnel controls. Internal audit function has objectives and to achieve its objectives there are factors that influence the achievement of those objectives.

### **2.5.1. Auditors Competency**

Basically, competency consists of people's knowledge, technical skills and interpersonal skill (Robbins & Judge, 2007:392). Bernardin (2010:107) said that competency means as: "Bundles of knowledge's, skills, or abilities". Competency has close relation with job quality, such as in audit.

In order to get high quality of the internal audit, it needs a competent internal auditor (Pickett, 2005). Lasmahadi (2002) stated that competence is personal attributes of a person which enables to achieve superior performance. Auditor competence was measured with four formative indicators, namely : (a) planning, where Dikolli (2004) stated that existence of a good audit planning makes auditor will potentially have competence to find material misstatements and in audit planning should consider client 's internal control system, audit risk, and substantive testing procedures ; (b) knowledge, where Tan and Libby (1997) stated that knowledge is one determinants of technical competence and very useful in auditors tasks structured; (c) experience, where Colbert (1989) stated that an experienced auditor will makes judgment with a lower error rate than inexperienced auditors so effecting competence ; and (d) supervision, where Malone and Roberts (1996) stated that strong supervision will prevent auditor possibility to act that reduce audit quality and supervised audit processes tends to produce a correct disclosure and higher audit quality. Another study conducted Kristo (2013) explored the role of auditors' responsibilities in detecting fraud. The results of the study show the absolute necessity of the internal audit, however it has to be highlighted that there is still room for improvement of some specific competencies of internal audit.

The study carried out by Bekele (2013) examines effective and efficient internal control system over cash operations in Cooperative Bank of Oromia using descriptive type of research method and both qualitative and quantitative or mixed methods. Analysis of the data collected shows that combination of cash operation functions and some personal relationships; lack of integrity, competence, knowledge and experience by employees working around cash operations; inadequate communication of proper information for decision making; misappropriation of cash; unsatisfactory verifications and weak internal audit functions in the bank which affects effective and efficient internal control systems in the bank.

### **2.5.2. Auditors Independence**

Independence has no single meaning and interpretation across the people; hence the concept is subject to ambiguity and uncertainty (Wines, 2012). However, for the purpose of the case study independent refers to the concept of being free from any management influence while internal auditors perform audit activities and issue audit report (Ahmad & Taylor, 2009; Belay, 2007; MoFED, 2004). Auditor independence was measured with four formative indicators, namely

: (a) audit market competition, where Beattie et al. (1999) said that audit market competition is reflected by high competitive prices that affect to reduce number of qualified personnel resources, so the risk to decline competence and independence of auditor ; (b) economic dependence, where Deis and Giroux (1992) stated that under high economic conditions the dependence can be used by client to oppress auditor by auditors change. This can make auditor will not be able to avoid client pressures, thus causing them to weaken independence; (c) non-audit services, where Ashbaugh (2004) stated that high presence of non-audit services will create high Effect of Competence and Auditor Independence on and (d) auditor assignment period where Dye (1991) stated that existence of long-term assignment potentially can undermine auditor independence, because it can foster closeness between management and auditors.

Baharud-din et al. (2014) stated that due to lack of independence and short of adequate staff, they are not timely in their internal audit reporting and components of internal control system are not properly put in place by the management of the institutions, especially in the area of authorization and approval, supervision, segregation of duties and personnel controls.

In 2007, a team of researchers led by Shmudin has conducted a research on the internal audit in the state and local government of Malaysia. The findings from in-depth interviews conducted with internal auditors from 27 Federal Ministries and 86 Departments, 13 State Governments, 112 Federal Government Agencies, 139 State Government Agencies, 144 Local Authorities and 15 Islamic Religious Councils. The result showed that internal auditors in public sector are facing difficulties in carrying out their functions effectively due to lack of independence, lack of competency since they were not only performing their auditing functions but also other duties as required by the boss.

Furthermore, many auditors have been argued that in order to achieve audit objectives and become effective organizational independence is very important. For instance, the independence of internal audit department and the level of authority to which the internal audit staff report are the important criteria influencing the objectivity of its work, and added that organizational independence is more crucial to the effectiveness of the internal auditors, as it protects the auditor from pressure or intimidation, and increases the objectivity of the auditing work (Cohen & Sayag, 2010; Van Peurse, 2005; Boa- Read, 2000). Greater quality of the auditing work and greater organizational

independence were positively related to auditing quality and auditors' evaluations. The correlations were stronger in the case of organizational independence.

### **2.5.3. Management Support**

The support and commitment of management also have the certain impact to make sure IA is functioning effectively. 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.

MOFED (2004) state that heads of internal audit should co-ordinate internal audit plans and activities with the management, other internal auditors, external auditors, and other review agencies to ensure the most effective audit coverage is achieved and duplication of the effort is minimized. In line with this thought, Van Gansberghe (2005) noted that the IA function should work closely together with operational managers to improve the organization's evaluation of risks and determining its risk appetite, to improve its systems, regulations, procedures and the ethical environment.

Miheret and Yismaw (2007) the findings of the study highlight that internal audit effectiveness is strongly influenced by internal audit quality and management support. Deribe and Regasa (2014) as a descriptive and regression result shows "performance" is the highest determinant factor of internal audit quality, followed by "competence" and "Information technology" respectively.

As mentioned by Cohen and Sayag (2010) the correlation and regression analyses show support from top management is the main determinant of IA effectiveness, with some effect also found for the organizational independence of IA. 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.

Mebratu (2012) carried out study on examine the role of internal audit function in public sector governance and challenges that have an effect on this function by using OLS multiple regression statistical model and found that competent staff, compliance with professional audit standards, and



sufficient funding is positively related with the control function of internal audit and role of internal audit function is positively related to competent staff and compliance with professional audit standards, and negatively related to top management support, formal mandate ,and unrestricted access.

J.Busee (2013) has done a study on the effectiveness of internal audit in business risk management in an organization: A case study from Tanzania in 2013. The results found that there is a positive relationship between internal audit resources and competencies and internal audit effectiveness in managing risks in organization in Tanzania. In addition J.Busee (2013) reveals that the perception of other employees about the office of the internal auditor was not impressive and challenge on the organization management's part to ensure internal audit effectiveness.

The findings of a study conducted by Njanike et al. (2007) assessed how lack of internal controls affected good corporate governance and aimed to bring out elements of good corporate governance. It emerged that failure to effectively implement internal controls contributed significantly to poor corporate governance. In their study,Njanike et al. (2007) resulted that in poor corporate governance and subsequently poor performance of a bank indicating the positive correlation between effective internal controls and good corporate governance.

Hailemariam (2014), conduct research based on Ethiopian federal government focusing on 15 purposively selected offices. This research is conducted through a descriptive statistics to evaluate the effects the correlation analysis. The results found that the management support, the existence of adequate and competent IA staff, and the availability of approved IA charter were contributed for the internal audit effectiveness in the public sector significantly and positively. In addition Hailemariam (2014) demonstrated that the management's perception for the IA value and the organizational independent of internal auditors were positively related with the IAE but their contribution for the IAE was statistically not significance.

#### **2.5.4. Organizational Setting**

According to Mihret and Yismaw, (2007) the organizational setting in which internal audit function operates has significant influence on the effectiveness of the function. Organizational setting includes the status of internal audit in the organizational structure; the probity 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.

Organizational setting which provides the context and environment to IA to operate their activities is also a factor to impact the effectiveness of IA. It sets of status, structures and criteria to regulate the internal audit to make it effective to provide service for the management. Thus, organizational setting can exert influence on the level of effectiveness that internal audit could achieve. The auditee attributes relate to the capability of the auditee to meet its intended objectives. Auditee attributes with implications on audit effectiveness include the auditees' proficiency to efficiently and effectively meet organizational sub-goals; their attitude towards internal audit; and the level of cooperation provided to the auditor. (Dassalegnet al., 2007).

Lack of authority for budget administration adversely influences performance of the internal audit function (Mihret and Yismaw, 2007). Hence the function needs to administer its own budget.

## **2.6. Conceptual Framework**

As cited by Njihia, A. and Makori, M.(2015) a conceptual framework is a written product, one that explains, either graphically or in narrative form, the main things to be studied- the key factors, concepts, or variables and the presumed relationships among them. For the purposes of this research, the effectiveness of internal control system is the dependent variable while the independent variable will be audit competency, organization independence and management support as illustrated with the aid of the conceptual model below.

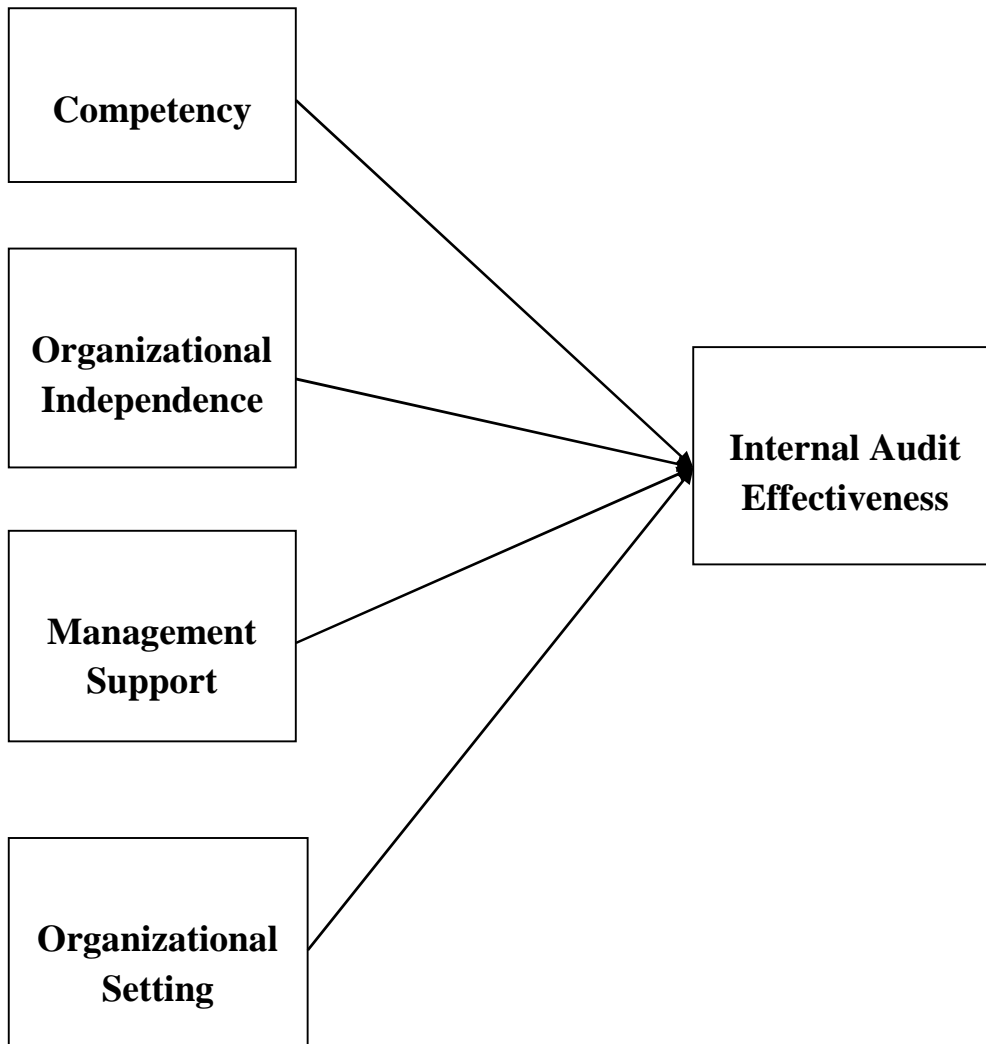
Deribe and Regassa (2014) study on 15 Ethiopian Commercial Banks by using dependent variable internal audit quality and independent variable competence, objectivity, performance, and Information Technology of internal auditors. Also Hailemariam (2014) study on selected Ethiopian Public Sector used the same dependent variable internal control effectiveness and independent variable of the management support, the management's perception, organizational independence and the availability of adequate and competent internal audit staff.

The study carried out by Bekele(2013) examine effective and efficient internal control system over cash operations in Cooperative Bank of Oromia using two elements of COSO which is control environment and control activities.

Internal auditors play a key role in monitoring a company's risk profile and identifying areas to improve risk management (Goodwin and Kent, 2006). Mean time the above mentioned studies show that they used different variables of internal audit effectiveness and internal audit quality for public sector and for Ethiopian Commercial Banks. For this paper the study carefully examining what are factors affecting internal audit effectiveness particularly on Commercial Bank of Ethiopia by providing empirical evidence that increase the body of knowledge in understanding the factors that influence the effectiveness of internal control.

### **Conceptual Framework:**

To achieve the research objective and to test the research questions, this study used the conceptual framework developed by Mihret and Yismaw, (2007).



## **3. CHAPTER THREE**

### **RESEARCH METHODOLOGY AND DESIGN**

#### **3.1. Research Design**

Research is a careful inquiry or examination to discover new information or relationship and to expand and verify existing knowledge. For this study the type of research used to conduct is explanatory type of research. Explanatory research will enable you to examine and explain relationships between variables, in particular cause and- effect relationships (Gill and Johnson 2002). In the course of the research quantitative data used utilized. Quantitative research uses positivist knowledge claims (such as cause and effect thinking, reduction to specific variables and hypothesis, use of measurement and observation, and test of theories) employs strategies of inquiry such as experiments and surveys and collect data on predetermined instrument that yields statistical data (Creswell, 2009). Quantitative methods strive to control bias so that fact can be understood in an objective way.

#### **3.2. Target Population**

According to Mason et al. (1997), the population of a study is the collection of all possible individuals, objects or measurements of interest. Commercial Bank of Ethiopia has total 120 branches in Addis Abeba, it was very hard to attempt cover all these bank branches. Time and financial limitations tended to narrow down the extent and depth of this study. Therefore, the study focused only Grade 4 branch offices which are 15 in number of management team and internal auditors which are found in Addis Ababa. According to the central data base of the bank Grade 4 branches have an employs that have management and internal audit position are 80. Thus, 25 management and 55 internal auditor staff members have participated in this study. Thus a census of all the staff used to conduct in the research.

#### **3.3. Data Collection Techniques**

Conducting appropriate data gathering instruments help researchers to combine the strengths and amend some of the inadequacies of any source of data to minimize risk of irrelevant conclusion. Consistent and reliable research indicates that research conducted by using appropriate data

collection instruments increase the credibility and value of the research findings. In conducting the research data that are going to be used primary data source only. The main data collection instruments used for gathering primary data is through Questionnaires. The questionnaires were distributed to the managers and the internal auditors of the Commercial Bank of Ethiopia Grade4 branch offices.

The questionnaire was adopted from the prior author and literature review (Mihret and Yismaw, 2007; Cohen & Sayag, 2010). Those questionnaires are prepared in the form of Likert-Scale type (showing respondents agreement or disagreement) by constructing into five point scale where the 1 represent strongly agree, 2 agree, 3 neutral, 4 disagree and 5strongly disagree.

### **3.4. Data Analysis Method**

Data analysis consists of examining, categorizing, tabulating, or otherwise recombining the evidence, to address the initial proposition of a study (Yin, 1989, p. 105). An important aspect of data analysis is the search for meaning through direct interpretation of what is observed by them as well as what is experienced and reported by the subjects.

To insure the reliability and validity of the questioner Cranach's Alpha formula was used to measure the reliability of the questionnaire. Descriptive analysis was conducted to provide details regarding demographic questions. Whereas, to determine the relationship among the dependent and independent variables correlation and regression analysis method are used by meeting the ordinary least square (OLS) assumptions of the linear regression through Statistical Package for Social Sciences (SPSS) software package.

### **3.5. Model Specification**

The following model is formulated for this research in order to test the research. To achieve the research objective and to test the research questions, this study used the model developed by Mihret and Yismaw, (2007); George et al (2015).

$$IAE = \beta_0 + \beta_1 CIAT + \beta_2 IIA + \beta_3 ORS + \beta_4 MS + e_i$$

**Where:**

- IAE            the internal audit effectiveness
- COM           the competency of internal auditors
- IND            the independence of internal audit
- ORS            the organizational setting
- MS            the Managements Support,
- $\beta_0$             is a constant, represents the effectiveness of IA when every independent variables are zero.
- $\beta_1$ - $\beta_4$         is the coefficient, in which every marginal change in variables on internal auditor's effectiveness affects correspondingly.
- $E_i$             the error term

**3.5.1. Measures**

**Internal Audit Effectiveness**

Given the lack of academic work on internal audit effectiveness, we found scales in the literature that were tested for their reliability which met the requirements of the study. We used the 49 internal auditing effectiveness items advanced by (Mihret and Yismaw, (2007);George et al, 2015) as starting point and I have tested their reliability (Cranach's Alpha) for all items with SPSS V20

**Dependent Variable**

Internal audit effectiveness- This variable was measured by thirteen items. The majority of these items dealt with internal audit effectiveness.

**Independent Variables**

This study was focused on four independent variables that might have an impact on the internal audit effectiveness in the Commercial Bank of Ethiopia branch offices. Those predicted variables investigated in this research are:

- **Competency:** consists of people's knowledge, technical skills and interpersonal skill

- **Organizational independence:** being free from any management influence while internal auditors perform audit activities and issue audit report.
- **Management support:** includes provide enough support and encouragement for training and developing the IA staff, full cooperation and access to records and information.
- **Organizational setting.** includes the status of internal audit in the organizational structure; the probity 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.

Similarly with the dependent variable items, all of the independent variables items were measured on a five point Likert-scale.

As shown in Appendix A of part II, thirty six different item questionnaires were constructed to identified each of the independent variables and asked to express their opinion for those items

### 3.6. Reliability Analysis

To carry out the reliability analysis, Cronbach’s Alpha ( ) is the most common measure of scale reliability and a value greater than 0.700 is very acceptable (Field, 2009; Cohen and Sayag, 2010) and according to Cronbach’s (1951), a reliability value ( ) greater than 0.600 is also acceptable. Moreover when we see the overall value for Cronbach’s Alpha ( ) is 0.931 for all variables which is very acceptable, then the responses generated for all of the variables’ used in this research were reliable enough for data analysis

**Table 3.6- Reliability Test**

<b>Variable</b>	<b>No of items</b>	<b>Cronbach's Alpha</b>
Internal Audit effectiveness	13	0.772
Competency	7	0.787
Independence	9	0.831
Management Support	11	0.891
Organizational Setting	9	0.819
<b>Over all</b>	<b>49</b>	<b>0.931</b>

*Source: Questionnaire Results, 2016*



## **4. CHAPTER FOUR**

### **RESEARCH FINDINGS: ANALYSIS AND DISCUSSION**

#### **4.1. Introduction**

As indicating in the previous chapter, the main attempt of this study is to investigate the determinants of internal audit effectiveness in the Commercial Bank of Ethiopia. Therefore, this chapter presents the analysis and discussions for research findings obtained from the questionnaires. It reports the investigation results obtained from senior managers and internal auditors of the Commercial Bank of Ethiopia Grade 4 branch offices covered in the questionnaire. The discussion begins with the questionnaires' response rate followed by the descriptive statistics of the respondents related questions; like the gender, age, profession, and level of education. The results of the reliability analysis and the regression assumption test also reported

#### **4.2. Descriptive Statistics**

##### **4.2.1. Response Rate**

The questionnaires were distributed to both the managers and the internal auditors of the Commercial Bank of Ethiopia Grade 4 branch offices. For these, a total of 80 questionnaires were distributed to all the managers and internal auditors and from which 78 questionnaires were collected giving the response rate of 97.5%. This shows good response rate both for the managers and internal auditors.

##### **4.2.2. Respondents Profile**

The table given below describes the general findings regarding the respondents age, sex, field of study and level of education for both the managers and the internal auditors. The respondents from the managers and internal auditors 47 (60%) were males and 31 (40%) were females.

The majority of the ages of respondents of the managers are fall under the age of 20-25 (66, 85%), 36-45 (11, 14%), and the rest falls in the age interval of above 45 (1, 1%) respondents. Here, the majority of the respondents are in the age of 20-25 (66, 85%) years.

**Table 4.1 Respondents General Profile**

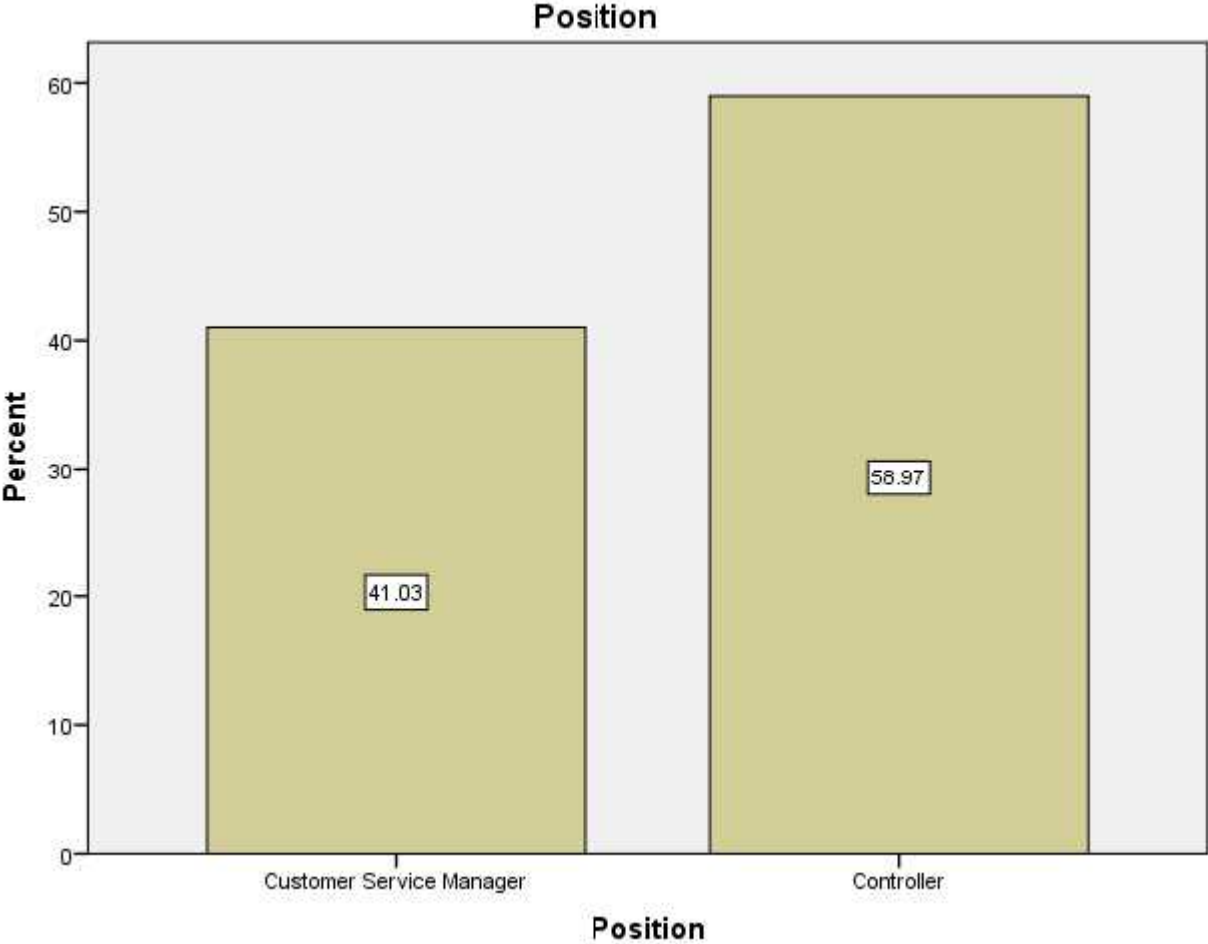
<b>Variable</b>	<b>Value</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Sex</b>	Male	47	60
	Female	31	40
	<b>Total</b>	<b>78</b>	<b>100</b>
<b>Age</b>	20-25	66	85
	36-45	11	14
	Above 45	1	1
	<b>Total</b>	<b>78</b>	<b>100</b>
<b>Field of Study</b>	Accounting	36	46
	Management	23	30
	Economics	15	19
	Marketing Management	2	3
	Banking & Insurance	1	1
	Public Finance & Administration	1	1
	<b>Total</b>	<b>78</b>	<b>100</b>
<b>Level of Education</b>	College Diploma	7	9
	Degree	63	81
	Masters	8	10
	<b>Total</b>	<b>78</b>	<b>100</b>

*Source: Questionnaire Results, 2016*

In the case of field of study the respondents were composed of from Accounting 36 (46%), Management 23 (30%), Economics 15 (19%), and others fields 4 (5%) fields. Here, the majority of managers and internal auditors were studied management and accounting fields respectively which shows the good assignment of professionals for their appropriate job.

In terms of the level of educational background, most managers and internal auditors have bachelor's degree 63 (81%) respectively followed by master's degree 8 (10%) and 7 (9%) respondents have diploma. These shows the majorities of the respondents were educated/or professional and can contribute more for the effectiveness of their intended work.

**Figure 4.1 Current Position**



As indicated on Figure 4.1 about 41% of respondents have above senior manager position and the rest 59% of respondents have branch controller position.

**Figure 4.2 Experience**



Also figure 4.2 above presented the work experiences of the respondents. Large number of them (63%) had 1-5 years' experience that is followed by (36%) with 6-10 year experience and the rest (3%) above ten years' experience. The above data shows that the respondents had adequate experiences. Thus, majority of the respondents are well experienced and capable enough to understand their duties and responsibilities. In addition, the respondents can easily understand this questionnaire and the responses obtained most likely expected to be reliable.

### 4.3. Descriptive Statistics mean and Standard Deviation

**Table 4.2 - Summary of Descriptive Statistics**

<b>Variable</b>	<b>Mean</b>	<b>Standard Deviation</b>
Internal Audit effectiveness	2.1686	0.772
Competency	2.7363	0.787
Independence	2.3533	0.831
Management Support	2.6072	0.891
Organizational Setting	2.5328	0.819

*Source: Questionnaire Results, 2016*

This sub section presents descriptive analysis regarding explanatory variables using mean and standard deviation. The mean value of each independent variable is interpreted based on Best (1997). According to (Best and Khan 1995), the decision rules used in the analysis was average mean less than 3 was considered as low, average mean equal to 3 was considered as medium and average mean greater than 3 was considered as high throughout the study.

The standard deviation of each independent variable is interpreted based on Best, (1977), the score from 1-1.80 is lowest, from 1.81-2.61 is lower, from 2.62-3.41 is average/moderate, from 3.42-4.21 is good/high, and 4.22-5 is considered very well.

Furthermore each independent variable is initially coded as 1 for strongly agree, 2 for agree, 3 for neutral, 4 for disagree and 5 for strongly disagree.

Table 4.8 shows that mean value of internal audit effectiveness is 2.1686 and standard deviation of 0.772. This implies that majority of the respondents' opinion approach to highly agree with the internal audit effectiveness bank, because the mean value is approach to 2. In addition to that the standard deviation implies is very low because it is less than 1.

As it is observed from the table regarding to competency the mean value is 2.7363 and standard deviation 0.787. This indicates that the respondents' perception is medium because the mean value is almost 3. Moreover the standard deviation implies very low which is less than 1.

The mean value of organizational independence is 2.3533 and standard deviation 0.831, which implies almost all the respondents have highly agree and the standard deviation indicates very low. When we see the management support it has the mean value of 2.6072 which is almost all the respondents perception is medium whereas the standard deviation is 0.891 which is very low.

Furthermore when we come to organizational setting the mean value is 2.5328 and the standard deviation is 0.819. This implies that the majority of the respondents approach is medium, In addition to that the standard deviation implies is very low because it is less than 1.

Finally, as it is observed on the Table 4.8 regarding to the internal audit effectiveness it is found that “competency” have the highest mean score (2.7363), followed by “Management Support” (2.6072), “Organizational Setting” (2.5328), “Independence” (2.3533) respectively.

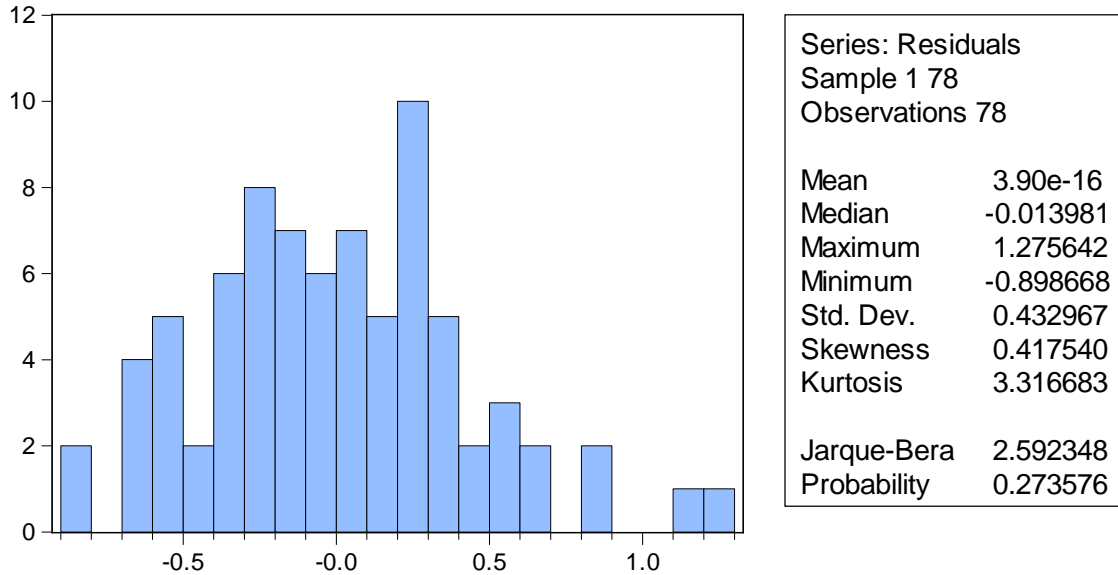
#### **4.4. Assessment of Ordinary Least Square Assumptions**

##### **4.4.1. Test of Normality**

Normality is the most essential assumption in multivariate analysis (Hair et al., 2010). It refers to distribution of data to particular variable and its corresponding to normal distribution. This means the data needs to follow a normal distribution in order to allowed analyses to work properly and make a stronger assessment (Froh, 2007). Pallant (2001) and Hair et al., (2010) suggested that, in order to meet up with the underlying assumption of a multiple regression analysis, normality of the data need to be checked. Normality screening is an essential step in almost all multivariate analysis (Tabachnick&Fidell, 2007).

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 figure 4.3 below that all variables were found to be normal and the presence of normality was accepted at  $p > 0.05$ .

**Figure 4.3. Normal distribution of the data**

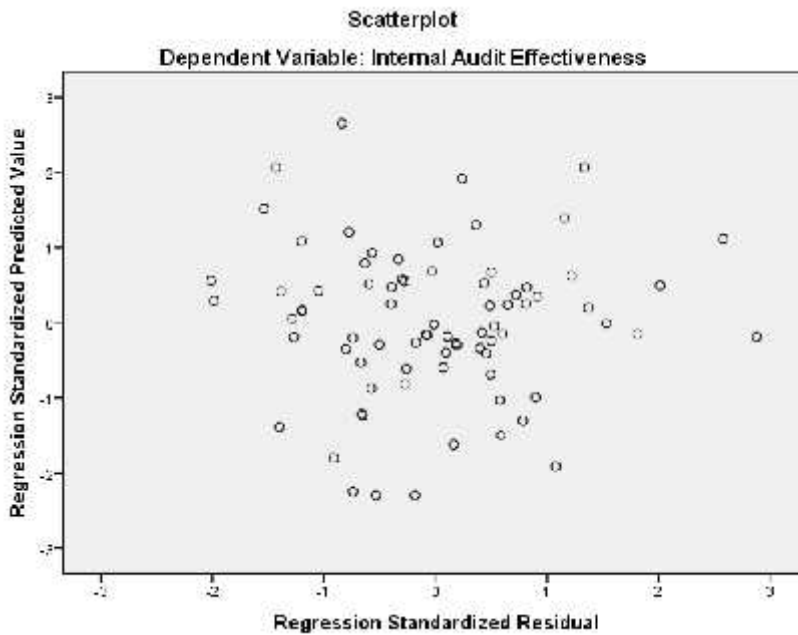


*Source: Survey data, 2016 Eviews output*

#### **4.4.2. Assessment of Heteroskedasticity**

As we can see on the following figures(Fig3) the distribution between dependent variable “internal audit effectiveness” with independent variable “competency”, “internal audit effectiveness” with “independence”, “internal audit effectiveness” with “management support” and “internal audit effectiveness” with “organizational setting” have no any kind of visible shape. Therefore, there is no problem on constant variance term.

**Figure 4. 4. Heteroskedesticity distribution of data**



#### 4.4.3. Constant Term

From the following table the constant term is significant since the P-value is 0.000. This shows the constant term fitted the model.

**Table 4.3 Regression Table**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.064	.235		4.531	.000
Competency	-.127	.121	-.161	-1.047	.299
Independence	.612	.104	.692	5.873	.000
Management Support	-.041	.098	-.057	-.414	.680
Organizational Setting	.046	.121	.054	.384	.702

*Source: Survey data, 2016 SPSS output*



#### 4.4.4. Multicollinearity Test

Correlation analysis was applied to determine the interrelationships among independent variables and to examine the possibility multicollinearity. In an ideal situation, independent variables are supposed to be highly correlated with the dependent variables than with other independent variables. Nevertheless, multicollinearity occurs as a result of highly correlation of independent variables with one another or exists when one independent variable is at linear combination with other independent variables (Keith, 2006). Independent variables are highly correlated among themselves when they are at (0.9 or above) (Hair et al., 2010; Tabachnick&Fidell, 2007).The current study, the highest correlation result is .715this indicates that problem of multicollinearity is not the threat. The following table presented this result.

**Table 4.4 Multicollinearity Table**

	<b>Competency</b>	<b>Independence</b>	<b>Management Support</b>	<b>Organizational Setting</b>
Competency	1			
Independence	.582	1		
Management Support	.711	.511	1	
Organizational Setting	.715	.558	.637	1

*Source: Survey data, 2016 SPSS output*

#### **4.5. Correlation Statistics**

A Pearson correlation matrix is provided for dependent and independent variables in Table 4.12. From the table, it is observed that there is a significant and positive correlation ( $r=0.240$ ) between “internal audit effectiveness” and “competency” at  $P<0.05$ , highly significant and positive correlation ( $r=0.599$ ) between “internal audit effectiveness” and “independence” at  $p$ -value 0.000, significant and positive correlation ( $r=0.288$ ) between “internal audit effectiveness” and “organizational setting” at  $P<0.01$  indicates that the correlation coefficient is statistically significant. However, there were no significant correlations between the “management support” and internal audit effectiveness. The correlation analysis was utilized to reject or accept research hypothesis in previous audit research in addition to the regression analysis (Cohen and Sayag, 2010).

**Table 4.5. Pearson Correlations Matrix**

		Internal audit Effectiveness	Competency	Independence	Management Support	Organizational Setting
Internal audit Effectiveness	Pearson Correlation	1				
	Sig. (2-tailed)					
Competency	Pearson Correlation	.240*	1			
	Sig. (2-tailed)	.034				
Independence	Pearson Correlation	.599**	.582**	1		
	Sig. (2-tailed)	.000	.000			
Management Support	Pearson Correlation	.217	.711**	.511**	1	
	Sig. (2-tailed)	.056	.000	.000		
Organizational Setting	Pearson Correlation	.288*	.715**	.558**	.637**	1
	Sig. (2-tailed)	.010	.000	.000	.000	

Source: Survey data, 2016 SPSS output

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

#### 4.6. Regression Result

The regression result that are obtained by regressing the internal auditor’s effectiveness in identifying noncompliance activities and the internal auditors ability in adding value for their organization on the competency (COM), organizational independence (OIN), the organizational setting (OS) and the managements support (MS), were analyzed.

From table 4.6, it can be seen that the multiple R (correlation) value of 61.6% (0.616) indicates positive relationship between the dependent and independent variable and R Square value for the

model showed that 37.9% of the dependent variable in the model can be predicted by the independent variables.

**Table 4.6: Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.616 <sup>a</sup>	.379	.345	.44479	2.233
a. Predictors: (Constant), Organizational Setting, Independence, Management Support, Competency					
b. Dependent Variable: Internal audit Effectiveness					

Source: Survey data, 2016 SPSS output

Table 4.7 presents the ANOVA report on the general significance of the model. As P is less than 0.05, the model is significant. Thus the combination of the independent variable (competency, independence, management support and organizational setting) significantly predicts the dependent variable (internal audit effectiveness) (F=11.151; P=.000).

**Table 4.7. ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.825	4	2.206	11.151	.000 <sup>b</sup>
	Residual	14.442	73	.198		
	Total	23.267	77			
a. Dependent Variable: Internal audit Effectiveness						
b. Predictors: (Constant), Organizational Setting, Independence, Management Support, Competency						

Source: Survey data, 2016 SPSS output

**Table 4.8. Regression Result for IAE**

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.064	.235		4.531	.000
	Competency	-.127	.121	-.161	-1.047	.299
	Independence	.612	.104	.692	5.873	.000
	Management Support	-.041	.098	-.057	-.414	.680
	Organizational Setting	.046	.121	.054	.384	.702

*Source: Survey data, 2016 SPSS output*

Table 4.8 shows the Beta coefficients that present the contributions or positive or negative relationship of each variable to the model. The t and p values showed the influence of the independent variable on the dependent variable. From this it indicates that the organizational independence had the highest affecting on internal audit effectiveness with comparing to competency, management support and organizational setting constructs. According to coefficient results organizational independence and organizational setting are positively to dependent variable and only organizational independence is highly significant, however competency, management support and organizational setting is not significant as individually because they have a sig. value of greater than 5%. The variable with the level of significance (sig) value less than 5% could make a significance unique contribution to the predicted value of the dependent variable, beyond this level of sig. the variable are not making a significance contribution for the prediction of the dependent variable (Pallant, 2007; Somekh and Lewinn, 2005).

The previous study reviewed that independence of internal audit is the most important factor affecting internal audit effectiveness according to the present research. Quite similar were the findings of Alzeban and Gwilliam (2014), Cohen & Sayag, 2010 and George et al (2015) who

argued that independence is one of the most important factors in their research. Regarding to organizational setting it can be argued that organizational setting is not significant Miheret and Yismaw (2007). Thus the model for predicting perceived internal audit effectiveness becomes:

$$\text{IAE} = 1.064 - 0.127\text{com} + 0.612\text{ind} - 0.41\text{ms} + 0.46\text{os}$$

**Where:** **IAE**= Internal Audit Effectiveness, **COM**= Competency, **OIN**= organizational independence, **MS**= Management support and **OS**= Organizational Setting

The beta coefficients tell us about the relationship between the outcome and each predictor. If the value is positive we can tell that there is positive relationship between the predictor and the outcome, whereas a negative coefficient represents a negative relationship between predictors and outcome. For these data organizational independence and organizational setting have positive beta values indicating positive relationship, whereas competency and management support have negative beta values indicating negative relationship. So, there is positive relationship between the predictors (organizational independence and organizational setting) and an outcome (internal audit effectiveness) since the value of beta coefficient is positive, whereas there is negative relationship between the predictors (competency and management support) and outcome (internal audit effectiveness) since the value of beta coefficient is negative.

Based on the above regression analysis of the above model, the organizational independence has highly significant positive effect on internal audit effectiveness (  $\beta = .612$   $P = .000$ ). The result were consistent with the previous auditing research works of Alzeban & Gwilliam (2014), Cohen & Sayag, (2010), and George et al (2015) they find that the organizational independence was the critical determinants of internal audit effectiveness. Similarly, in this research finding the organizational independence to strength internal audit through freely access of necessary documents, information and data about the organization for audit work, and can provide audit finding /report/ freely and directly to the responsible body, and this all supports the IA effectiveness in their office.

Based on the above regression analysis of the above model, there is negative and no significant correlation where found between auditors competency and internal audit effectiveness (  $\beta = -.127$   $P$

=-1.047). The result was different from some previous auditing researches (Arena and Azzone, 2009; Cohen and Sayag, 2010) they argued that there were correlation between competency and the internal audit effectiveness. Those studies reason out both the technical competence and continuous training of internal audit team are essential requirements for internal audit effectiveness but with the lower value of all factors.

There is a positive not significant relationship between internal audit effectiveness and organizational setting (  $\beta = .046$   $P = .702$ ). It implies that organizational setting has a positive influence on internal audit effectiveness. This result is similar with the previous study is also reviewed organizational settings are not significant (Mihret and Yismaw, 2007).

Management Support has negative influence on internal audit effectiveness and it is not statistically significant on the internal audit effectiveness (  $\beta = -.041$   $P = .414$ ). The result is against with the findings of Cohen and Sayag (2010) and Mihret and Yismaw (2007). Those studies reason out they the top management support was the critical determinants of internal audit effectiveness in audit finding and the commitment to strength internal audit through hiring proficient internal audit staff, developing career channels for internal audit staff, and providing internal audit work independence. The management support in terms of providing resources, giving trainings, introducing with new technologies, providing enough facilities and encourages the internal audit process with commitments to promote and communicate their added value for the effectiveness of internal audit work in their office contributes for the IAE.

Lastly organizational independence has dominant influence than competency, management support and organizational setting. It contributes 61.2% (12.7 % competency, 4.1% management support and 4.6% organizational setting) for internal audit effectiveness.

## CHAPTER FIVE

### 5. SUMMERY, CONCLUSION AND RECOMMENDATION

#### 5.1. Summary

The objective of the study was to examine the factors affecting internal audit effectiveness using statistical analysis; both descriptive and inferential statistics. The research instruments were survey questioners developed with censes method of applicable constructs. A total of 80 questioners were distributed to managers and internal auditors of CBE. Normality and reliability test were conducted to tested data collected. Reliability is 0.931 for all variables which is very acceptable.

The result from Pearson Correlation analysis showed that all the three independent variables (competency, independence, and organizational setting) are positively and significantly correlated with the dependent variable (Internal Audit effectiveness) however there is no significant correlations between the “management support” and ” internal audit effectiveness”.

Furthermore, in Multiple Regression analysis which has been conducted, adjusted R-square indicates that 34.5 % ( $R^2 = 0.345$ ) of the variation in dependent variable (internal audit effectiveness) can be explained by the four independent variables (competency, organizational independence, management support and organizational setting). According to Coefficients table, it shows that only organizational independence significantly affecting the dependent variable as significance values .000. It means that organizational independence highly significant affecting dependent variable (internal audit effectiveness) and competency, management support and organizational setting are insignificant to the dependent variable. Based on the Standardized Coefficients Beta value, it is found that organizational independence ( $\beta = 0.692$ ) is the most effective factor whereas management support ( $\beta = -0.54$ ) is found to be the least effective factor in affecting internal audit effectiveness.



## 5.2. Conclusion

This study investigated the factors affecting internal audit effectiveness of Commercial Bank of Ethiopia, to identify factors affecting internal audit effectiveness, using a model developed for the analysis. The model consisted of four interrelated factors: competency; organizational independence, management support and the organizational setting.

Regarding the organizational independence, it can be argued that independence of internal audit is the most important factor affecting internal audit effectiveness according to the present research. Quite similar were the findings of Alzeban and Gwilliam (2014), Cohen & Sayag, 2010 and George et al (2015) and who argue that independence is one of the most important factors in their research. Therefore, the study concludes that independence of internal auditors' is the most important determinant factor that affects the internal audit effectiveness in Commercial Bank of Ethiopia. Organizational independence has a positive effect on internal audit effectiveness. It means the higher organizational independence, the higher audit effectiveness.

In addition, the correlation analysis (shown on table 4) showed the contributions of the independent variables to the internal audit effectiveness which is the management support were not significantly correlated with internal audit effectiveness to the Commercial Bank of Ethiopia.

Furthermore, the regression analysis (shown on table 7) showed competency, management support and organizational setting are not significant enough to undermine internal audit effectiveness in Commercial Bank of Ethiopia, and therefore this conclusion requires future research should consider the impact of these determinants on internal audit effectiveness.

### 5.3. Recommendation

Given the findings of the study, it has been suggested that the following recommendations be considered for adoption so as to assist in the assessment of factors affecting internal audit effectiveness, Commercial Bank of Ethiopia should consider the following points:

- ❖ The finding of this research proved that the organizational independence has statistically significant and positively related with the internal audit effectiveness; Commercial Bank of Ethiopia should emphasize on that predictor. Organizational setting has also positive influence on internal audit effectiveness and it is better to consider it.
- ❖ Make the Commercial Bank of Ethiopia office independence by paying attention to the needs and desires of internal auditors, by giving attention to audit findings to perform their duties efficiently and effectively.
- ❖ Internal Audit of Commercial Bank of Ethiopia should be established as a separate unit to ensure that independence of internal auditor is maintained.
- ❖ Establish a clear and formally defined responsibilities and authorities of internal auditing in an audit charter.
- ❖ Finally; make the internal auditors of Commercial Bank of Ethiopia regular and direct working relations with the head of internal audit committee, general managers and managerial team. More over must have free access to information and data about the organization and unrestricted access to the sites.

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## **APPENDIX**

### **APPENDIX A: QUESTIONNAIRES**

#### **Dear Participant:**

The intent of this questionnaire is to explore information regarding the determinants of Internal Audit (IA) effectiveness and to conduct research for the partial fulfillment of Masters of Business Administration in Accounting and Finance at St. Mary University. The questionnaires are distributed to the Commercial Bank of Ethiopia head office and branch offices that found in Addis Ababa city.

The results of the study are expected to contribute to identify the determinants of 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, and 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,

MedhanitAmare,

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# I. Questionnaire

## A. Personal Background

1. Sex/Gender/:

Male (\_\_\_\_\_)

Female (\_\_\_\_\_)

2. Age (in year):

20 to 25(\_\_\_\_)

36 to 45 (\_\_\_\_\_)

26 to 35(\_\_\_\_)

above 45 (\_\_\_\_\_)

3. Your field of study:

Accounting (\_\_\_\_\_)

Economics (\_\_\_\_\_)

Management (\_\_\_\_\_)

other specify\_\_\_\_\_

4. Level of education:

College diploma (\_\_\_\_\_)

Masters Degree (\_\_\_\_\_)

Bachelor's Degree (\_\_\_\_\_)

others specify\_\_\_\_\_

5. Current position in your office \_\_\_\_\_

6. Experience \_\_\_\_\_

## B. Questions

Please indicate whether you agree or disagree with each statement by ticking ( ) on the spaces that specify your choice from the options that range from „strongly agree“ to „strongly disagree“.

Note: SA- Strongly Agree

A- Agree      DA- Disagree

N- Neutral      SD- Strongly Disagree

S.N	Regarding to Internal audit Effectiveness	SA	A	N	DA	SD
1	Internal audit ensure that it adds value to the business.					
2	Internal auditors can effectively identify and report any non-compliance activities with the company policies, procedures and process.					
3	Internal Auditors provide useful recommendations and constructive criticisms on non-compliances activities or control systems in the company.					
4	The noncompliance reports provided by internal auditors are reliable and significant to the company.					
5	The internal auditors have confidence to issue audit report because they are capable to determine the nature and frequency of non-compliance.					
6	The number of complaints (doubts) about the internal auditors' finding (report) is very low because their report is correct and reasonable.					
7	Internal audit ensures the economical, effective and efficient use of resources in the company					
8	The recommendations of internal audit division provide practical, cost-benefit solutions for correcting the problems that were found					
9	Internal auditors have the experience and expertise to address corporate risk management problems within the organization					
10	The existing role that the internal audit is playing sufficient enough to address the very purpose for which it is established					
11	The internal auditor reports are highly considered for decision making and internal controls by the management					
12	Internal audit improve divisions' performance					
13	Internal audit improves organizational performance					
	<b>Regarding to Competency</b>					
14	The professional qualifications and training of IA employees are high.					
15	My office has sufficient skilled internal auditors. Most of them have certification in auditing.					
16	It is possible to audit and review each activity on time, and cover the planned scope of auditing activities					
17	The audit procedures and evidence collections are completed on time, since enough and skilled internal auditors are available or employed					

18	The internal audit staff number & their skill matches the scope of Office's internal operations.					
19	The work of internal audit is performed with modern technology that uses computerized data tools and specific IA software.					
20	The internal audit department has sufficient number of staff who is responsible to undertake auditing activities.					
	<b>Regarding to Independence</b>					
21	I perform the auditing activities without any interference from Any body and without any influence from the office/sector.					
22	Internal audit is free from intervention in performing its audits					
23	I feel free to include any audit finding in my audit work and report directly to responsible body					
24	I objectively examine auditing issues only meeting on reliable audit evidence and no management interest is involved for adjustment beyond auditing standards & values.					
25	I feel free to include any audit finding in my audit work and report directly to responsible body.					
26	I freely decide the scope, time and extent of auditing procedures based on auditing standards and the office's/sector's policy.					
27	Internal audit provides reports to audit committee.					
28	The internal audit function has strategic position to contribute to organizational strategy performance.					
29	The current structure of internal audit promotes objectivity, consistency and business understanding.					
	<b>Regarding to Management support</b>					
30	Management is sufficiently aware of the needs of internal audit.					
31	Management perceive internal audit as value adding function.					
32	The office supports internal auditing staffs by budgeting funds for certification to have relevant education in auditing that allows them to audit all of the organization's systems.					
33	I receive full cooperation, access to records and information from my office.					
34	I can get the necessary resources (facilities) that help me to perform auditing activities as needed.					
35	Management does provide enough support and encouragement for training and developing the IA staff.					
36	The office supports me to introduce myself with new technology, policy or procedures when it is necessary.					
37	The IA department is valued by management and makes valuable contributions during meetings.					
38	The IA gets the attention of top management and focuses it on issues audited by IA.					

39	The head of the internal audit in your organization effectively develop and implement appropriate framework to measure internal audit performance.					
40	Management staffs are highly understood and appreciate the role of internal audit function.					
	<b>Regarding to Organizational Setting</b>					
41	The purpose of internal audit is clearly defined.....					
42	Internal audit has policies for hiring internal audit staff					
43	Internal audit has policies for training of internal audit staff					
44	There is a complete internal audit manual to guide internal audit					
45	Internal audit department is large enough to successfully carry out its duties					
46	The internal audit staffs possess knowledge and skills in a variety of area (beyond accounting and finance) as necessary					
47	Internal audit is free from intervention in performing its duties.....					
48	Internal auditors feel free to include any audit findings in their audit report					
49	Internal audit obtains sufficient budget to successfully carry out its duties					