



*COLLEGE OF BUSINESS AND ECONOMICS*

*DEPARTMENT OF ACCOUNTING AND FINANCE*

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*DETERMINANTS OF INTERNAL AUDIT EFFECTIVENESS: STUDY ON OROMIA'S  
SELECTED WESTERN ZONES.*

A THESIS SUBMITTED TO THE DEPARTMENT OF ACCOUNTING AND FINANCE IN  
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF  
SCIENCE IN ACCOUNTING AND FINANCE

*BY:* MISGANA ENKOSA

*ADVISOR:* P. LAXMIKANTHAM (PHD)

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*ADDISABABA, ETHIOPIA*

## Declaration

I have conducted a thesis on “Determinants of internal audit effectiveness: Study on Oromia’s selected western zones” in partial fulfillment of the requirements of the MSc Degree in Accounting and Finance with the constructive guidance and support of the research advisor. I, the undersigned state that this study report is my unique work and has not presented for a degree in any university, and all the resources used for this study have been properly acknowledged.

Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

## Endorsement

This thesis has been submitted to Addis Ababa University, department of Accounting and finance for Examination with my sanction as a university advisor.

Name of Advisor: P. Laxmikantham (PhD)

Signature: \_\_\_\_\_

Date: January, 2021

## Statement of Certification

This is to endorse that the research project prepared by Misgana Enkosa entitled “Determinants of Internal Audit Effectiveness: Study on Oromia’s selected western zones” submitted in partial fulfillment of the requirement for Master of Science in Accounting and Finance complies with the regulations of the university.

### APPROVAL BY BOARD OF EXAMINERS

Advisor

Signature

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Internal Examiner

Signature

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External Examiner

Signature

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## *Abstract*

*The main intention of this study is to look at the determinants of internal audit effectiveness in Oromia's selected zones local government administration offices. The researcher gathered data from primary sources. The highest manager and the internal auditors of the chosen offices are the source for the specified data which was collected through the questionnaires administered to them. The primary data has been collected by distributing five point Likert scale questioner to the sampled respondent. The study has been conducted by taking purposive sample and the questionnaires were collected from 116 internal audit staffs and top managers of purposively selected local administrations offices. To attain the objective of the study descriptive and explanatory research design was considered. The data analysis part was done using SPSS version 20 (Statistical Package for the Social Science). The demographic variables were analyzed through descriptive statistics tools. To investigate the effect of independent variables on internal audit effectiveness, correlation and regression analysis were used. Additionally, the finding of this study is to indicate the direct relation effects of organizational independence of internal auditors, internal auditor's professional proficiency, management support, availability of data technology resource, and the presence of approved internal audit manual with the interior audit effectiveness within the local administration offices. The regression output show that each one independent variables: Independency, professional proficiency of internal auditors, Management support, Information technology, and approved Internal Audit manual were positively related with and contributed significantly for the interior audit effectiveness. In keeping with the finding of the study all predictor variables were positively related with internal audit effectiveness and their contribution for the interior audit effectiveness were statistically significant at 95% level of confidence. Authority's administrations are supposed to understand that the contributions of those variables were collectively significant to spot any noncompliance activities and to feature values for the inner audit effectiveness within the offices. This study is vital for both academicians and managers because it helps to advance the understanding of things determining internal audit effectiveness and may accustomed solve the sensible problems facing the inner audit within the offices.*

*Key Words: Internal Audit; local administration offices; internal audit effectiveness; determinants of internal audit effectiveness;*

## Table of contents

Contents	Page
Declaration.....	ii
Endorsement.....	iii
Certification.....	iv
Acknowledgement.....	v
Abstract.....	vi
Table of contents .....	vii
List of tables and figures.....	x
Acronyms.....	xi
CHAPTER ONE.....	1
1.Introduction.....	1
1.1. Background of the Study.....	1
1.2. Statement of the problem.....	3
1.3. Objective of the Study.....	4
1.3.1. General Objective.....	4
1.3.2. Specific Objectives.....	4
1.4. Hypothesis .....	4
1.5. Relevance of the study.....	7
1.6. Scope of the study.....	8
1.7. Structure of the study.....	8
CHAPTER TWO.....	9
2. Literature Review.....	9
2.1. Introduction.....	9
2.2 Theoretical Review.....	10
2.2.1. Overview of the Internal Audit.....	10

2.2.2. Types of Audits Performed by Internal Auditors (MoFED, 2005).....	11
2.2.3. Internal control system.....	12
2.2.3.1 Components of internal control.....	13
2.3. Empirical Review.....	16
2.4. Study Variables.....	20
2.4.1 Dependent Variable.....	20
2.4.2 Independent variables.....	21
2.5. Summary .....	24
2.5.1 Conceptual Framework.....	25
CHAPTER THREE.....	26
3. RESEARCH METHODOLOGY.....	26
3.1. Introduction.....	26
3.2. Research design.....	26
3.3. Population of the study.....	26
3.4. Sample size and sampling technique.....	26
3.5. Source of data and data collection method.....	27
3.6. Data analysis method.....	27
3.7. Model Specification.....	28
CHAPTER FOUR .....	29
4. Research Findings: Analysis and Discussion.....	29
4.1. Introduction.....	29
4.2. Descriptive Statistics.....	29
4.2.1. Response Rate.....	29
4.3 Demographic Characteristics of the Respondents.....	29
4.4. Scale Reliability Test.....	31
4.5. Internal Audit Effectiveness .....	32
4.5.1 Internal Audit Independency.....	33
4.5.2. Auditors proficiency .....	34
4.5.3. Management Support .....	35



4.5.4. Information technology.....	36
4.5.5. Approved Internal Audit manual.....	37
4.6. Correlation and Regression analysis.....	38
4.6.1. Correlation Analysis.....	38
4.6.2. Regression analysis.....	39
4.6.2. Ordinary Least Square (OLS) Assumptions Tests.....	39
4.6.2.1. Normality Test.....	39
4.6.2.2. Multicollinearity Test.....	39
4.6.2.3. Autocorrelation Test.....	40
4.6.3. Regression Results and Hypothesis Testing.....	41
4.6.4. Hypotheses Test summary.....	43
CHAPTER FIVE.....	47
5. Summery, Conclusion and Recommendation.....	47
5.1 Introduction.....	47
5.2 Summary of Major Findings.....	47
5.3 Conclusion.....	48
5.4. Recommendations.....	49
5.5 Limitation and Implications for Further Research.....	51
Reference.....	52
Appendix 1: Questionnaires.....	55
Appendix2. Frequency Table for demographic variables.....	60
Appendix 3: Descriptive and Reliability Statistics.....	61
Appendix 4: Regression Diagnostic tests.....	63

## List of tables and figures

Tables	pages
Table 4.3.1 Demographic characteristics.....	33
Table 4.3.2 Reliability Statistics.....	35
Table 4.3.3 Internal Audit Effectiveness.....	35
Table 4.3.4 Internal Audit Independency.....	36
Table 4.3.5 Auditor’s proficiency.....	37
Table 4.3.6 Management Support.....	38
Table 4.3.7 Information technology.....	39
Table 4.3.8 Approved Internal Audit manual.....	40
Table 4.6.1 Correlation Analysis.....	41
Table 4.6.2 Normality Test.....	42
Table4.6.3 Collinearity Statistics.....	43
Table 4.6.3.1 Model Summary.....	44
Table 4.4.5 Regression result.....	44
Figure	
2.5.1 Conceptual framework.....	28

## ACRONYMS AND ABBREVIATIONS

AIAM:	Approved Internal Audit manual
IA:	Internal Auditing
IIA:	Institute of Internal Auditors
IAD:	Internal Audit Department
IAE:	Internal Audit Effectiveness
IAID:	Internal Audit Independence,
IAF:	Internal Audit Function
IAP:	Internal Auditors Proficiency
IT:	Information Technology
MS:	Management Support
OLS:	Ordinary Least Squares
SPSS:	Statistical Package for Social Science

## CHAPTER ONE: INTRODUCTION

### 1. Introduction

#### 1.1 Background of the study

There is a scholarly justification that “Every country that is administered in a democratic policy needs to be accountable in its use of public funds and in providing effective, efficient and economical service delivery. To achieve those government objectives, applying internal audit function were the major instrument for controlling and using of all scarce resources available in the organization”(Van Gansbergh, 2015, pp. 69-73).

There are calls for governments globally, and especially in Africa, “to be accountable for the huge resources they hold on trust and manage for the people who gave them the political and administrative authority. The public sector represents a principal-agent relationship. The officials or administrators act as the agents while the citizens are the principals” (Julius & Patrick, 2018, .pp. 617). The government spending is a very big business and the public demands to know whether the huge outlays of money are being spent wisely for public interest. The citizens need an independent third party to lend credibility to the stewardship accounts rendered by the agents, that is, the government. “They rely upon the auditor to provide an independent, objective evaluation of the accuracy of the agent’s accounting and to report on whether the agents have used the resources in accordance with the principal’s wishes” (AlMatarneh, 2011 & Al-Shammari, 2010).

“Specifically, Local government managements are entrusted with public resources and saddled with the responsibility of managing these resources effectively and efficiently. It is expected that, the local government officials entrusted with the management of public resources at local government level will give account of how these resources are being managed under their care. In order to ensure proper utilization of these resources entrusted to the local government officials, laws are enacted to control the local government revenues and expenditures” (Modibbo, 2015).

“However, the process of accountability is not complete without auditing, which presently remains one of the most neglected and misunderstood area of the financial management cycle, especially in the public sector” (Maru, 2002). For an audit to be meaningful the audit unit must be seen to be truly independent and the report produced by internal auditor will assist in providing information for planning, decision making and performance evaluation.

The objective of auditing is to review and evaluate the activities of the organization with a view to express an opinion on the efficiency and effectiveness of management, as well as the adequacy of internal control within an organization. “Therefore, internal auditor is charged with the responsibility of safeguarding the assets and liabilities of an organization and other constructive services that will enhance the efficiency and effectiveness of the operations of the organization, through the review of accounting systems, internal control systems, implementation of the corporate policies, and carrying out special investigations assigned by the management” (Modibbo, 2015).

However, due to different factors IA become ineffective in conducting an audit function. Thus, this ineffectiveness leads them not to prevent and detect frauds. So this fraud negatively affects an economy as a whole, by causing huge financial losses, weakening social stability, threatening democratic structures, leading to a loss of trust in the economic system, or corrupting and compromising economic and social institutions.

According to Mihret & Yismaw, (2007) in their case study, they argue that internal audit recommendations are not afforded enough management attention and support which adversely affect the effectiveness of internal audit. “Lack of mechanisms in place to follow up the implementation of internal audit recommendations; absence of strategic plan and consistent documentation styles for audit work, lack of resources, poor leadership for internal audit function (IAF), absence of appropriate framework to measure IAF performance, and lack of competent personnel are also some challenges of internal auditors” (Mihret & Yismaw, 2007).

Internal audit effectiveness is arguably a result of the interaction among different factors: internal audit quality, management support, organizational setting, attributes of the auditee, and the competence of the audit team and the independence of internal audit (Mihret & Yismaw, 2007; and George, The ofanis & Konstantin’s, 2015). An internal audit function's capability to provide useful audit findings and recommendations would help raise management's interest in its recommendations. Hence, scrutinizing these major factors that affect the effectiveness of internal audit of local governments is the critical task of different parties.

## 1.2. Statement of the problem

Examining the determinant factors that affect internal audit effectiveness is vital, because effective internal audit work can cause the development of 4 important processes within the organization: learning (educating staff the way to do their work better), motivation (auditing also results in improvement of performance), deterrence (knowing that an audit is discourage any things which will cause abuse), and process improvements (internal audit also make sure that the proper things are wiped out the proper way) (Mihret & Yismaw, 2007)

Literature has showed that different government councils have internal audit department with internal audit staff that administered internal audit activities (Adeyemi, Akindele, & Agesin, 2012; Coker & Adams, 2012). This establishment is according to the supply made by department of government under the interior audit guidelines; which strongly recommends that each one government councils should have an indoor audit function for the subsequent reasons: (i) to supports good internal governance (ii) to make sure consistency with other levels of state (iii) to enhance the effectiveness of risk management, control and governance processes (iv) helps to instill public confidence in an organization's ability to work effectively and efficiently (IAG, 2008).

(Shewamene Hailmariam, 2014) conducted a research on "the determinants of internal audit effectiveness in selected Ethiopian public sectors". The management teams and the internal auditors of the selected public sector were the source for the required data to the researcher through the questionnaires administered. According the researcher finding, 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. However, his finding show that the remaining two variable; the managements perception for the IA value and the organizational independent of internal auditors contribution for the IAE were statistically not significant.

On the other hand, the study conducted on "Determinants of Internal Audit Effectiveness in Roads Construction Sector, Case Study in Ethiopian Roads Authority" by (Fetu Ahmed, 2016), show that variables taken into the study such as Audit Quality, Auditors competency, Top Management Support, Independence of internal audit and Approved Internal Audit Charter were contributed significantly for the internal audit effectiveness. The finding of the study show that the beta value of independence of

internal audit variable is  $\beta = 0.109$ , with a significant P value of  $< 0.05$ , which infer that the Independence of internal audit is positively and significantly impacted the effectiveness of internal audit effectiveness.

Another study conducted by (Shiferaw Yisasu, 2017) on “Determinants of internal audit effectiveness: a case study among selected public sectors in north Gondar zone” The study was used descriptive & explanatory research designs that are used to explain the effect of the variables on determinants to the internal audit effectiveness. The researcher also, conclude the variables of the study: management perception, management support, organizational independence of internal auditors, adequate & competent internal auditor’s staff and presence of approved internal audit manual were significantly affect internal audit effectiveness of public sector management.

(Sisay Gebre, 2018) also, conduct study on “Factors influencing effectiveness of internal audit in public sector offices in East Shewa, Ethiopia” The researcher adopted a cross-sectional descriptive research design using quantitative method for data collection and analysis purpose. Purposive sampling techniques were used. The researcher has collected primary data through survey from internal auditors and managers of public sectors. The researcher analyzed the collected data using descriptive statistics and presented the data in terms of percentages, frequency distribution and tables. The research findings indicated that the four factors such as; independence, competency, management support and availability of information technology resource have influence on effectiveness of internal audit in public sectors.

Though, there are a number of investigations taken place on the determinants of internal audit effectiveness there is a contradiction among the findings of the researchers. And also, the scholars state that internal audit effectiveness is arguably a result of the interplay among various factors. However, these factors which have an immense effect on internal audit effectiveness aren't thoroughly investigated and limited inquiry has taken place concerning the factors affecting the interior audit effectiveness in both public sectors and government administration offices.

With reference to this, the researcher was attempted to spot the determinants influencing the effectiveness of internal audit in local government administration offices. Specifically, how Independency of internal auditors, Auditors proficiency, Top management support, Information technology, and approved Internal Audit manual influence the effectiveness of internal audit in Oromia’s selected western zones local administration office.

### 1.3. Objective of the study

Any study is conducted with one or more objective to realize , which will be to unravel a problem; to spot unknown facts; to elucidate realities; to look at effects or causes or maybe to predict situations. So, out of various initiations this study has the subsequent general and specific objectives.

#### 1.3.1 General objective

The main objective of the study is to research the determinants of internal audit effectiveness in the Oromia's selected western zones local administration.

#### 1.3.2 Specific objectives

This study is conducted with the subsequent specific objectives:

- A. To examine the effect of Independence of internal auditors on internal audit effectiveness.
- B. To examine the effect of professional proficiency of internal auditors on internal audit effectiveness
- C. To identify the effect of top management support on internal audit effectiveness.
- D. To evaluate the effect of availability of information technology on internal audit effectiveness.
- E. To identify the effect of having approved internal audit manual on internal audit effectiveness.

### 1.4 Hypothesis of the study

#### Internal Audit Effectiveness

The Institute of Internal Auditors (IIA, 2010) defines internal audit effectiveness as “the extent to which established objectives are achieved.” it's the extent to which an indoor audit office meets its purposes and may ask ability of auditors, internal or external, to realize established objectives within a corporation (Mihret &Yismaw, 2007). Albeit the degree of internal audit effectiveness tends to vary within organizational levels also as country (Al-Twaijry et al., 2003), the management of organizations should have a transparent objective for internal auditors to realize, given the available resources and other means might aid the achievement of such objectives.



## Internal Audit Independence

Independence is freedom from conditions that threaten the power of internal audit activities to hold out internal audit responsibilities objectively (AAIPI 2014). The independence of internal audit refers to how the independence of internal audit organization is often enforced in its assignment. Few authors have examined that the greater the independence and objectivity of internal audit department, the greater the interior auditor's effectiveness. Arena &Azzone (2009) "revealed that IA effectiveness increases when the CAE is affiliated to the IIA. In fact, internal auditors' members of the IIA are independent and that they can manage conflicts between the loyalty of the profession and therefore the organization's requirements". These arguments cause the subsequent hypothesis:

H1: Internal auditors independence affects the Effectiveness of Internal Audit.

## Auditors Proficiency

Professional proficiency is that the expertise, specialized knowledge and skills showcased during a field during which one is practicing professionally. Appropriate staffing of an indoor audit department (Al-Twajjry, Brierley, &Gwillian, 2003) and good management of these staff remain fundamental to the effective operation of an indoor audit department. Staff of an IA unit should have the requisite education, training and knowledge to conduct the complete range of audits required by its mandate.

The International Standards for the Professional Practice of Internal Auditing (ISPPIA) highlights the importance of internal audit team who possesses the knowledge, skills, and other competencies necessary to perform their responsibilities (ISPPIA, Standard 1210). "Indeed, internal auditors must collectively have the required education, professional qualifications, experience and training to be ready to add value and improve the organization's operations" (Mihret &Woldeyohannis, 2008; Ali &Owais, 2013).

Previous studies suggest that proficiency of internal auditors may be a critical determinant of IA effectiveness (Van Gansberghe, 2005). Within the Saudi environment, Al- Twajjry et al. (2003) noted that "the adequate level of competencies of internal audit staff in terms of coaching , experience, knowledge, and professional qualifications have a positive influence on the effectiveness of IA". Other studies suggest that lack of competence of internal auditors is an

obstacle to the effectiveness of IA during a number of African countries (Mihret & Yismaw, 2007). Next to the present background, researcher formulates the subsequent hypothesis:

H2: Professional proficiency of internal auditors affects effectiveness of internal audit.

### Management Support

Top management support is crucial to the acceptance and appreciation of the IAF within a corporation. ISPPIA states that internal auditors should be supported from top management to execute their duties and fulfill their responsibilities. Indeed, the interior audit department should have sufficient resources to enhance the effectiveness of its activities. "Support from management is critical to fulfilling an efficient internal audit function, either within the public sector or within the private sector"(Cohen & Sayag, 2010).

(Alzeban & Gwilliam, 2014) found that "management support was the foremost important factor influencing IA effectiveness within the Saudi public sector organizations". They noted that IA effectiveness would be enhanced by hiring trained and experienced staff, and providing sufficient resources. Supported the preceding discussion, the researcher formulates the subsequent hypothesis:

H3: Support from top management affects the effectiveness of internal audit.

### Information technology

Currently, technology features a rapid development. It's not doubtful that entities will use more technology now and within the future to management and audit. as an example, Krishna (2011) found that "effective use of audit technology tools is critical to the success of audit activity", which can definitely improve the interior audit quality and eventually affect the effectiveness of IA. Additionally, Advances in information technology has led to an in depth collaboration between IT auditors and financial auditors leading to a better demand for internal auditors with ERP know-how. The above arguments cause the subsequent hypothesis:

H4: The presence of Information technology resource affects the effectiveness of internal audit.

### Approved internal audit manual

Internal audit manual is defined by the IIA as "a formal document that defines the activity's purpose, authority and responsibility. The manual should be (a) establish the interior audit

activity's position within the organization; (b) authorize access to records, personnel and physical properties relevant to the performance of managements; and (c) defined the scope of internal audit activities”(IIA, 2001). Different authors are explained the presence of defined audit manual in organizations will helps auditors to be effective. as an example , O. Regan (2002) concludes that “a well drafted manual is a crucial ingredient for the IA effectiveness. It helps to direct the efforts of audit staff and defines what the board can expect on the reassurance it required on control from an IA”.

(Van Peurse, 2005) added that “the presence of a robust manual adds a politician and revered layer of authority to the position of IA within the company. It's also a crucial feature of insuring success in achieving the independent status of an IA”. Furthermore, the existence of audit manuals in organization influences senior management to flow the recommendations of the interior auditor (Van Peurse, 2005) which successively affects IA effectiveness. “A well-defined internal audit manuals will helps internal auditors to be effective and contributes to realize the attempt of ensuring independent status of internal auditors” (Van Peurse, 2005; O'Regan, 2002). Consistent with the above the fifth research hypothesis is developed as follows:  
H5: The availability of approved internal audit manual affects the effectiveness of internal audit.

### 1.5. Relevance of the study

The internal auditors have a big influence to regulate any non-compliance activity in line with the established policies, plans, procedures, laws and regulations, set by the gov't which could have a big impact on both private and governmental organization's operations. Specially, in developing countries like Ethiopia, studying internal audit effectiveness is important to compact fraud and corruption. One among the bottom to extend internal audit effectiveness is studying factors which affect internal audit effectiveness, thus why this study was focused on identifying factors determining internal audit effectiveness in government administration offices. Therefore, this research is extremely essential to point out the effectiveness of the interior auditors by identifying the factors which determines internal audit effectiveness in local administration offices. And also, it'll useful for both academician and practitioners. For academicians it'll further improve the understanding of things determining internal audit effectiveness. For practitioners it's going to help to unravel the sensible problems facing the

interior audit effectiveness in local administration offices, and also, the results of the study cause recommendation to strengthen any weak area revealed within the empirical.

### 1.6. Scope of the study

The study is concentrated on the identifying determinants of internal audit effectiveness in Oromia's selected western zones local administration offices namely: west shewa, south west shewa, horo guduru and 6 woredas purposively selected from each zones. The target groups of the population are the highest manager and therefore the auditor of Oromia's selected western zones local administration offices. Additionally, this study is to research the chosen determinants of the interior audit effectiveness; like internal audit independency, auditors proficiency, management support, information technology and presence of internal audit manual in selected local administration offices.

### 1.7. Structure of the study

In addition to the introduction page, this research consists of 5 chapters. The primary chapter with its sub topics was introductory parts incorporated the introduction, statement of the matter, research objectives, research hypotheses, Relevance of conducting the study, and Scope of the study. The second Chapter describes the detail review of related literatures with reference to the interior audit effectiveness and therefore the variables which affect the interior audit effectiveness. The third chapter expresses the knowledge regarding the sampling techniques wont to conduct the research. The fourth chapter is that the analysis, discussions and presentation part of the research findings and eventually, the last chapter describe about the conclusions and proposal followed by the references and appendixes.

## CHAPTER TWO

### 2. Related Literature Review

#### 2.1. Introduction

Organizations have encountered rapid changes in economic complexity, expanded regulatory requirements, and technological advancements in recent years. Additionally to those changes the present corporate scandals and therefore the global financial crisis also pushed the general public and regulatory bodies to offer unique position to internal audit in corporate governances for internal assurance services (Soh& Bennie, 2011). These changes have given the IA a group of expanded opportunities to support and advice management; evaluate risk exposures concerning the organizations governance, operations and knowledge systems, identify control system efficiency and effectiveness, provide services to other organizational functions; and generate direct reporting links to the audit committee and shareholders; safeguarding of assets; and compliance with laws, regulations, and contracts (IIA, 2001; MoFED, 2004).

To become efficient and effective in economic activity, the performance of the management should regularly measure and assessed to require corrective actions when bad performance is found. Accordingly, the management of the general public offices is responsible to follow up the implementation of policy and procedure, and submit reports on the performance of the economy (MoFED, 2004). Therefore, the effectiveness of IA should receive the greater attention in research area to reinforce the standard of its report. In line with this, the research had focused on the determinants of Internal Audit effectiveness in selected government administration offices. “Nevertheless, Internal Audit is subject to several problems that affect internal auditors’ effectiveness in several corporate governances (Cohen & Sayag, 2010; Arena & Azzone, 2009; Belay, 2007; Mihret & Yismaw, 2007). During this study the literature review consists of the definition of internal audit and therefore the term effectiveness, the sort of auditing activities performed by the interior auditors and therefore the internal audit effectiveness instrument of improving government administration offices management like the interior audit independency, internal auditors proficiency, management support, information technology resource, and

therefore the presence of approved Internal audit manuals by referring different books, reviewing and analyzing prior researches and journals.

## 2.2 Theoretical Review

### 2.2.1. Overview of the Internal Audit

Different literatures defines internal audit in several ways, but the quality definition is formed from important issues that form the essential framework of internal audit principles. An easy and more traditional meaning of internal auditing is defined as: an independent appraisal function established within a corporation to look at and evaluate its activities as a service to the organization. Later on, the new Institute of Internal Audit (IIA, 2001), defined internal audit as: “Internal auditing is an independent, objective assurance and consulting activity designed to feature value and improve an organization’s operations. It helps a corporation accomplish its objectives by bringing a scientific , disciplined approach to gauge and improve the effectiveness risk management, control and governance process”.

According to this definition the main scope of the interior auditors are making assurance to the organization and giving consultant services to the general managements of the company governance. By providing the independent opinion and conclusions regarding the operation, function, system and wellbeing of the organization the IA can provide assurance services; and by giving the service supported the required requests of an engagement client the interior auditor can give consultation service to clients.

The Statement on Auditing Practice (SAP-6) of the Institute of Chartered Accountants of India describes internal audit as “the plan of organization and every one the methods and procedures adopted by the management of an entity to help in achieving management’s objective of insuring, as far as possible, the orderly and efficient conduct of its business, including adherence to management policies, the safeguarding of assets, prevention and detection of fraud and error, the accuracy and completeness of accounting records and timely preparation of reliable financial information”. On the opposite hand, internal audit may be a critical analysis of functioning of varied 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. The above definitions of internal audit feature a component of independence, although its extent, and the way it's achieved, may be a topic in its title.

IIA Implementation Standard 2110.C1 says that: 'during consulting engagements, internal auditors should address risk according to the engagement's objectives and will be aware of the existence of other significant risks'. By providing the independent opinion and conclusions regarding the operation, function, system and wellbeing of the organization the IA can provide assurance services; and by giving the service supported the required requests of an engagement client the interior auditor can give the consulting service to the organization. "The aim of internal auditing is to enhance 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're efficient and appropriate for the organization's policies; and (4) reporting recommendations for improvements to management" (Eden & Moriah 1996). "The subject is deserving attention because internal auditors are important, even crucial, in an economy that relies upon independently produced information" (Van Peurse 2005). "Indeed, IA has become an important management tool for achieving effective control in both public and personal organizations" (Eden and Moriah 1996). "By detecting weaknesses in management operations, IA provides a basis for correcting deficiencies that have eluded the primary line of defiance before these deficiencies become uncontrollable or are exposed within the external auditor's report" (Eden and Moriah 1996).

### 2.2.2. Types of Audits Performed by Internal Auditors (MoFED, 2005)

The major difference between internal auditing and independent auditing is the internal auditing serves management while independent auditing serves third party financial statement users. They are similar in that both involve collecting and evaluating evidence relating to assertions.

**Operational Audits:** An operational audit is further oriented independent and systematic evaluation performed by the internal auditor for management of the operational activities controlled by top, middle and lower level management for the purposes of improving organizational profitability and increasing the attainment of the opposite organizational objectives.

**Financial Audits:** These audits review accounting and financial transactions to work out if commitments, authorizations, and receipt and disbursement of funds are properly and accurately recorded and reported. This type of audit also determines if there are sufficient controls over cash and other assets and that adequate process controls exist over the acquisition and use of resources.

**Compliance Audits:** These audits determine if entities are complying with applicable laws, regulations, policies and procedures. Examples include federal and state laws, and Trustee policies.

**Information Systems (IS) Audits:** These audits review the interior control environment of automated information science systems and the way people use these systems. The audits usually evaluate system input, output; processing controls; backup and recovery plans; system security; and computer facilities.

**Internal Control Reviews:** These audits focus on the components of the major business activities, such as payroll and benefits, cash handling, inventory and equipment, physical security, grants and contracts, and financial reporting.

**Information Systems Audits:** These audits review the interior control environment of automated information science systems and the way people use these systems. The audits usually evaluate system input, output; processing controls; backup and recovery plans; system security; and computer facilities.

**Management Auditing:** A management audit is a further oriented independent and systematic evaluation of the activities of all level of management performed by the internal auditor for the purposes of improving of organizational profitability and increasing the attainment of other organizational objectives.

**Environmental audit:** is an audit which confirms the degree of compliance with both internally & externally determined emission & pollution standards.

### 2.2.3. Internal control system

Internal control is a process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories: effectiveness and efficiency of operations; accuracy, reliability and timely preparation of financial reports; prevention and detection of fraud and error; compliance with internal policies and applicable laws and regulations; and safeguarding of assets against unauthorized acquisition, use or disposition.



Internal control can also be defined as the whole system of controls, financial or any other, established by the management , in order to carry on the business of the company in an orderly manner, safeguard its assets, promote operational efficiency, encourage adherence to prescribed managerial policies and secure the accuracy and reliability of its records. It includes the plans, policies and procedures adopted by the management of an entity to assist in achieving management’s objective of ensuring the orderly and efficient conduct of its business, including adherence to management policies, the safeguarding of assets, prevention and detection of fraud and error, the accuracy and completeness of the accounting records and timely preparation of reliable financial information.

The internal control system comprises the control environment and control procedures. It includes all the policies and procedures adopted by the directors and management of an entity to assist in achieving their objective of ensuring, as far as practicable, the orderly and efficient conduct of its business, including

- Adherence of internal policies
- The safeguarding of assets
- The prevention and detection of fraud and error,
- The accuracy and completeness of the accounting records, and
- The timely preparation of reliable financial information.

### 2.2.3.1 Components of internal control

**Control environment (CE):** Control environment is the framework within which controls operate. The control environment is very much determined by the management of a business.

Control environment is the overall attitude, awareness and actions of directors and managers regarding internal controls and their importance in the entity. The control environment encompasses the management style and corporate culture and values shared by all employees. It provides the background against which the various other controls are operated.

The following factors will be reflected in the control environment.

- The philosophy and operating style of management
- The entity's organizational structure

- The directors' methods of imposing controls.

**Risk assessment:** Management should carefully consider the factors that affect the risk that the organization's objectives will not be achieved. The scope of management's risk assessment is more comprehensive in that it involves consideration of factors that affect all of the organization's objectives. If management effectively assesses and responds to risks, the auditor will typically need to accumulate less audit evidence than when management fails to do so, because control risk is lower.

For example, the following factors might be indicative of increased financial reporting risk:

- Changes in the organization's regulatory or operating environment
- Changes in personnel
- Implementation of a new or modified information system
- Rapid growth of the organization
- Changes in technology affecting production processes or information systems
- Introduction of new lines of business, products, or processes
- Expansion or acquisition of foreign operations
- Adoption of new accounting principles or changing accounting principles

**Control activities:** they are those policies and procedures which management has established to achieve the entity's specific objectives. Control procedures entail the fundamental functions which must be separated and adequately supervised: authorization, custody, and recording, which are discussed below.

Segregation of duties: Responsibilities for authorizing transactions, recording them and handling the related assets (called 'custody of assets') should be divided. No one individual should perform more than one these responsibilities. There are four general guidelines for segregation of duties to prevent both intentional and unintentional errors. A discussion of each of the guidelines follows below:

Separation of the custody of assets from accounting: The reason for not permitting a person who has temporary or permanent custody of an asset to account for that asset is to protect the firm from fraud. When one person performs both functions, there is an excessive risk of his disposing of the asset for personal gain and adjusting the records. For example, if the cashier receives cash and maintains both the

cash and account receivable records, it is possible for him to take the cash received from a customer and adjust the customer's account by failing to record a sale or by recording a fictitious credit to the account.

Separation of the authorization of transactions from the custody of related assets: It is desirable, if possible, to prevent persons who authorize transactions from having control over the related asset. For example, the same person should not authorize the payment of a vendors invoice and also sign the cheque in payment of the bill. Similarly, the authority for adding new employees to or eliminating terminated employees from the payroll should not be given to the person responsible for distributing payroll cheques. The authorization of the transaction and the handling of the related asset by the same person increase the possibility of fraud within the organization.

Separation of duties within the accounting function: The least accounting system is one in which one employee is responsible for recording a transaction from its origin to its ultimate posting in the general ledger. This enhances the likelihood that unintentional or intentional errors will remain undetected and it may encourage sloppy performance of duties. It is possible, however, that a single bookkeeper may be cost effective.

There are many opportunities for automatic cross checking of different employees' work in a manual system by simply segregating the recording in journals from the recording in related subsidiary ledgers. It is also possible to segregate the responsibility for recording in related journals, such as the sales and cash receipts journals.

Separation of operational responsibility from record keeping responsibility: If each department or division in an organization were responsible for preparing its own records and reports, there would be a tendency to bias the results to improve its reported performance. In order to ensure unbiased information, record keeping is typically included in a separate department under the controller. The overall organizational structure of a business must provide proper segregation of duties, yet still promote operational efficiency and effective communication.

**Information and Communication (IC):**The information systems used by companies, which are primarily computer information systems (CIS) includes the accounting system; production system; budget information, personnel system; systems software; and information about external events,

activities and conditions. The accounting information system consists of methods and records established and designed to:

- Identify and record all valid transactions, assets and liabilities,
- Describe the transactions on a timely basis in sufficient detail to permit their proper classification for financial reporting,
- Measure the value of transactions, assets and liabilities in a manner that permits recording their proper monetary value in the financial statements,
- Present the transactions and related disclosures properly in the financial statement.

**Monitoring:** Should address whether proper accounting records are being maintained and whether the financial information used within the business and for publication to third parties is reliable. Monitoring can be achieved by performing ongoing activities or by separate evaluations. Ongoing monitoring activities include regularly performed supervisory and management activities whereas separate evaluations are monitoring activities that are performed on a non-routine basis.

### 2.3. Empirical Review

Different authors and researchers ideas and recommendations regarding the related topic of determinants of internal audit effectiveness reviewed as follows:

According to the co relational analysis done by (Cohen, A. & Sayag, G., 2010), “the objective of the study was to examine audit effectiveness in Israeli organizations, but its primary goal should be seen as to stimulate more research on this overlooked scientific issue. Given the surprising lack of research on this issue, they designed a scale for measuring the effectiveness of internal audits. They also advanced conceptual determinants and developed scales for measuring them. Further research should naturally replicate the findings here in order to establish further the factor structure, enriching the dimension of function of IA, they are cooperate and support these process. IA effectiveness is a multidimensional construct. The quality of the internal auditor’s work, the evaluations of the auditees’ and the value added contribution of IA were found to be the three dimensions that encompass the concept of IA effectiveness. Regression analysis was used in the case of auditees’ evaluations. The lack of a relationship between IA effectiveness, career and advancement, and professional proficiency shows that the effectiveness of IA depends more on organizational characteristics than on the qualifications and work setting of the IA staff. It should be noted that the findings of this study are supported the Israeli

work and IA settings. They suggest that future research should consider other determinants that were found significant in correlation analysis. It is possible that the results would be different in other countries, a possibility that should be examined in future research. Despite this limitation, this study shows the importance and relevance of a scientific examination of IA's effectiveness, and its determinants" (Shiferaw yisasu, 2017). Previous researcher conduct a study about "value of internal audit function in fraud detection" and proposed that a limitation in this study was the fact that having internal audit may be associated sectors with good governance and internal controls, i.e. it was therefore those other factors that increase the propensity to detect the fraud rather than internal audit. There are many other areas of future research from the issues explored in this study. Firstly, the effectiveness and value of internal audit within sector should be examined further in different ways. Most of the prior research has just focused on perceptions from external auditors in this area. Secondly, auditors' responsibilities for fraud detection have clearly been increasing in recent years. There should be more research on ways to enhance auditors' abilities during this area (Paul Coram, Colin Ferguson, Robyn morony, 2006). "The research conducted by Moses anguye (2011) examined that "effectiveness of internal control systems in achieving value for money in School Facility Grant projects" in Kamuli local Governments. The findings revealed that internal control systems have significant positive effect in achieving value for money & all the constructs of internal control system (control environment, control activities, Risk assessment, information & communication and monitoring) have a significant positive relationship with value for money in local Governments. Data was gathered using a self-administered questionnaire; respondents who directly or indirectly involved in School facility grant project were selected from Auditor General, Accountants Committee and School managers. Having known the significant of internal control systems LGs need to ensure that they continuously review them and they are operational. The researcher suggested that further study could be carried out among the projects in the Central Government to establish the effectiveness of internal control systems in achieving value for money. And also further study should concentrate on the examination of other factors for the attainment of value for money" (Shiferaw Yisasu, 2017).

(ShewameneHailmariam, 2014) conducted a search on "the determinants of internal audit effectiveness in selected Ethiopian public sectors". "The main purpose of the study was to research on the determinants of internal audit effectiveness. The management teams and the internal auditors of the selected public sector were the source for the required data to the researcher through the questionnaires

administered. He found that existence of effective internal audit in the sector links with internal control risk management system, improves organizational efficiency and effectiveness, reduce information asymmetry during decision making, and ensures reliability of financial reporting process. By considering this aspect, the study identified factors that determine the IA effectiveness in the public sectors and then analyzed the organizational dimensions in which the public sector should carry out to improve the IA effectiveness. In addition, the finding of this study was to point out the relations of management perception, management support, and organizational independence of internal auditors, adequate and competent internal auditor's staff and the presence of approved internal audit manual with the internal audit effectiveness on the public sector management. The public sectors 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 public sectors" (Shiferaw Yisasu, 2017). The research conducted on role of internal audit function in promoting effective corporate governance of commercial banks in Kenya by Michael K, C.& Gladys, R. 2015) state that "internal audit function was traditionally designed to safeguard firm's assets and assist in the production of reliable accounting information for decision making. Similar studies have argued that the internal audit function had influence on the corporate governance of the sector. The aim of this study was to determine the role of internal audit function in promoting effective corporate governance of Commercial Banks in Kenya. This study adopted a descriptive research design & used stratified random sampling. Structured questionnaire was used to gather data. Data collected was coded and analyzed using Statistical Package for Social Sciences (SPSS) for descriptive statistics and inferential statistics. The study established that all the independent variables of the internal audit function, risk identification, measurement and prioritization approach adopted by the bank, internal audit independence and staffing of the internal audit department that have a positive and significant impact on effective corporate governance"(Michael &Gladys, ).

"Another study conducted on Factors related to Internal Audit Effectiveness: by (Drogalas George, Karagiorgos Theofanis and Arampatzis Konstantinos, 2015) was that the study investigates the precise factors related to internal audit effectiveness in the Greek business environment. Empirical evidence was collected by means of a mailed survey. Factor Analysis and regression analysis are used in order to illustrate the gathered information. The findings indicate that the main factors affecting internal audit effectiveness are: (1) quality of internal audit, (2) competence of internal audit team, (3) independence

of internal audit and (4) management support. The result shows that independence of internal audit is the base of internal audit effectiveness, as it is the most crucial factor in our model. Finally, the paper concludes that internal audit is extremely important. Another research conducted on Effective Internal Audit as a Tool for Fraud Deterrence in Nigerian Organizations by (J. Nnam Ima, 2015) The study examined the internal audit activities in some Nigerian firms was Generally internal control being an integral part of corporate governance has faced a lot of regulatory reforms thanks to the company scandals and financial crisis within the economic environment. Nigeria has continually been faced with high level of financial loss due to fraudulent practices. Specifically, the study looks at internal audit, as an important aspect of internal control to examine, if there is a positive and significant relationship between its effectiveness and fraud prevention. The study adopted the analytical survey method. The population comprised of senior management and staff of internal control department of firms listed on the Nigerian stock exchange. Data was collected through questionnaire with five likert scale designed to capture information on internal audit processes in the organization. Logistic multivariate analysis was wont to test the hypothesis and therefore the result showed that a positive and significant relationship between the interior audit practices and fraud deterrence. Therefore they recommend that necessitate of internal audit department, ensuring independence of the internal audit unit, attention paid to internal auditors report and recommendation and regular evaluation of the effectiveness of the internal audit unit” (shiferawyiasu,2017).

Another research conducted on evaluation of effectiveness of internal audit in the Nigerian public sector by (Udeh, Sergius Nwannebuik, 2016). “This paper was generally designed to evaluate the effectiveness of internal audit in the Nigerian Public Sector. Simple sampling technique was wont to select 4 of the federal Parastatals located in Enugu State of Nigeria. Accountants and internal auditors in the Parastatals were used as study population. A self-structured questionnaire, using a four-point modified Likert scale was the instrument for data collection. The paper recommended a thorough and transparent recruitment process for internal audits” (Udeh, Sergius Nwannebuik, 2016). The above limitations of studies are opportunities to conduct studies by extending the current method of data collecting to triangulate the evidence and to explore comparative data in different methods and study areas. This research is focused on the determinants of internal audit effectiveness in selected local government administration offices. Internal auditing has become an integral part of organizational structure as a value adding service to organizations. The determinants of internal audit effectiveness are

used to measure the improvement of local government administration offices through internal audit. The internal auditors have significant impact to control any noncompliance activities, to give consultancy service, & to add value to the offices.

## 2.4. Study Variables

### 2.4.1 Dependent Variable

The variable for this research was internal audit effectiveness. Internal audit effectiveness is measured in terms of internal auditors' ability to identify non-compliance activities with laws, regulations, procedures and policies, and value added contributions to IA effectiveness of the public sectors.

#### Internal Audit Effectiveness

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, Othman, & Jusoff, 2009; Mihret et al, 2010).

Institution of Internal Audit IIA (2010) defined internal audit effectiveness "as the degree (including quality) to which established objectives are achieved". Therefore, going by the above definitions of effectiveness and audit effectiveness, it's clear that audit effectiveness or internal audit effectiveness is means the same thing because they all have central target which is 'the The variable for this research was internal audit effectiveness. Internal audit effectiveness is measured in terms of internal auditors' ability to identify non-compliance activities with laws, regulations, procedures and policies, and value added contributions to IA effectiveness of the public sectors.

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(Mihret and Yismaw, 2007) described the characteristics of effective internal audit unit from the internal audit point of view. “Effective Internal Audit undertakes an independent evaluation of financial and operating systems and procedures, contributes to the achievement of organizational goals, needs management’s commitment to implement recommendations, provides useful recommendations for improvements as necessary, affected negatively by lack of attention from management which - in turn adversely affects the audit attribute. Therefore Understanding the factors that influence internal audit effectiveness is important. In order to make internal audit to be effective more researches should be undertaken on factors which affects internal audit effectiveness”(Mihret and Yismaw, 2007).

The main aim of this research will be to examine factors which affect internal audit effectiveness. After reviewing literatures the following factors will be taken as an independent variable for internal audit effectiveness. These are Independence of internal audit, professional proficiency, Top Management Support, information technology and the presence of internal audit manual. And the existing literatures are reviewed as follow

#### 2.4.2 Independent variables

The independent variables are the variables that affect the internal audit effectiveness in local government administration offices.

##### Independence of internal audit

Being Independent is the freedom from the control and direct influence of line management this definition is an important to the extent of audit work and enhances internal audits objectivity and integrity. Cohen and Sayag (2010) also argue that “organizational independence of internal audit affects internal audit effectiveness”. Auditor independence has long been considered as the key driver

of the audit function. (Al-Twaijryetal.2003). Cohen (2010) and (Mihretet al. (2010), found that auditor independence positively associated with perceived IA effectiveness.

#### Auditor's proficiency

“Professional proficiency is that the expertise, specialized knowledge and skills showcased during a field during which one is practicing professionally. Appropriate staffing of an internal audit department (Al-Twaijry, Brierley, &Gwillian, 2003) and good management of those staff remain fundamental to the effective operation of an internal audit department. Staff of an IA unit should have the requisite education, training and experience to conduct the full range of audits required by its mandate. Quality of audit work embodies the extent of excellence in the audit work which is normally attained when the audit work is performed according to IA standards”(Armstrong &Yidana, 2019).

proficiency can be relate to the ability of an individual to perform a job or task properly base on academic level, experience, skill and the effort of the staffs for continuing professional development. Competency determines the efficiency of the auditor in setting a systematic and disciplined approach to evaluate and improve the effectiveness of the organization's activities and financial management as well as governance processes proficiency of internal auditor also considered as important factor for effective internal audit. In line with ISPPA, Mousa (2005) considered proficiency and due professional care (competence) as a big element of internal auditing. Alzeban and Gwilliam (2014) argue that higher internal audit effectiveness is related to greater competence of internal audit staff. Therefore, this study extends the prior studies by examining the relationship between competence of internal auditors and IA effectiveness.

#### Management Support

“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 &Sayag, 2010). Internal audit effectiveness according to the literature is the outcome of the support given by the top management. As it is analyzed above, Mihret and Yismaw (2007) argued that there's 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). Similarly, Alzeban and Gwilliam (2014)

indicated that “management support is positively and significantly associated with internal audit effectiveness and is also positively associated with all the other variables affecting internal audit effectiveness”.

### Information technology

“Currently, technology has a rapid development. It is not doubtful that entities will use more technology now and in the future to management and audit. For instance, Krishna (2011) found that “effective use of audit technology tools is critical to the success of audit activity”, which will definitely improve the internal audit quality and eventually affect the effectiveness of IA. In addition, the study of Krishna (2011) found that “effective use of audit technology tools is critical to the success of audit activity”, which will definitely improve the internal audit quality and eventually affect the effectiveness of IA.

On the other hand, Ahmi and Kent (2013) stated that technological availability could also include both human resources and IT infrastructure. Additionally, Advances in information technology has led to a close collaboration between IT auditors and financial auditors resulting in a higher demand for internal auditors with ERP know-how. New IT systems enabled internal auditing to provide management with more relevant information at lower cost and without delay by automated processes, real time facilities and integrated internal auditing. (Shin et al., 2013; Sobel and Kapoor, 2012) Therefore, IT will definitely play an important role in influencing the effectiveness of IA” (Sisay Gebre, 2018).

### Approved Internal Audit manual

Internal audit manual is defined by the IIA as “a formal written document that defines the activity’s purpose, authority and responsibility. The charter should be (a) establish the internal audit activity’s position within the organization; (b) authorize access to records, personnel and physical properties relevant to the performance of managements; and (c) defined the scope of internal audit activities”(IIA, 2001).

It may also defines access to the knowledge (documents, records, systems, and personnel) necessary to perform and reach conclusions on the work, and it's a vehicle for asserting that there are noun reasonable limitations on the scope of the auditor work. “The charter should clearly identify and record any limitations and alter to actual or potential changes on internal and external conditions that

affect its ability to provide internal control assurance from a forward looking perspective” (O. Regan.2002).

Different authors have been explained the presence of defined audit charter in organizations will helps auditors to be effective. For instance, O. Regan (2002) concludes that a well drafted charter is an important ingredient for the IA effectiveness. It helps to direct the efforts of audit staff and defines what the board can expect on the reassurance it required on control from an IA. Van Peurseem (2005) added that the presence of a strong charter adds an official and respected layer of authority to the position of IA in the company. It is also an important feature of insuring success in achieving the independent status of an IA. Furthermore, the existence of audit charter in organization influences senior management to flow the recommendations of the interior auditor (Van Peurseem, 2005) which successively affects IA effectiveness.

## 2.5. Summary

The literatures show that advantage of having Internal Audit function within the offices is increasing the likelihood of detecting fraud in the offices. Despite increasing attention to the IA’s role within the organization, only limited researchers have been examined the determinants of effectiveness of its function. A number of these studies were Internal Audit related and organizational characteristics to the effectiveness of its function.

As it is analyzed in the literature review, Mihret and Yismaw (2007) argued that “there is a positive relationship between selected variables and internal audit effectiveness”. Finally, a well-defined internal audit manual will helps internal auditors to be effective and contributes to achieve the attempt of ensuring independent status of internal auditors (Van Peurseem, 2005; O’Regan, 2002).

From the empirical literature studied it can be noted that effectiveness of internal audit function is determined by different variables such as; independency, proficiency, management support, Information Technology, and approved internal audit charter. Therefore, this study also aims to establish the relationship between effectiveness of internal audit function and the independent variables that affect the internal audit task accomplishments in case of Oromia’s selected western zones local administration office.

### 2.5.1 Conceptual Framework

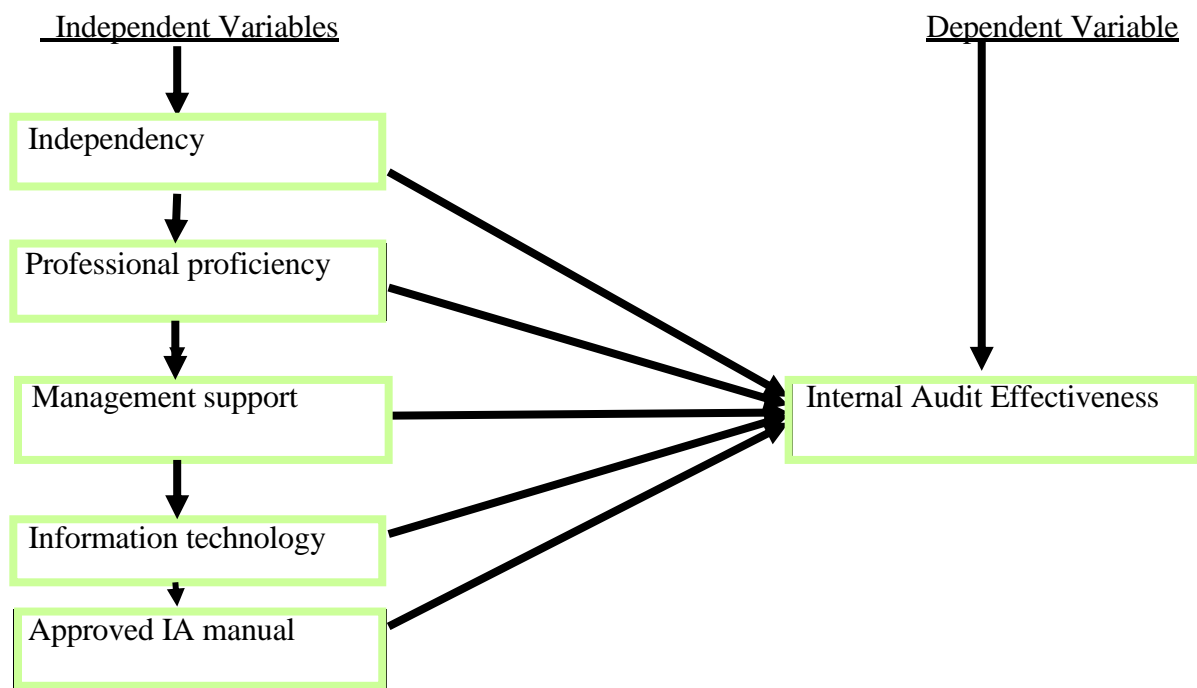


Figure1. Conceptual framework for the study

Source: Authors' construct, 2021.

## CHAPTER THREE: RESEARCH METHODOLOGY

### 3.1. Introduction

The design of any scientific research requires considerable attention to the research methods and the proposed data analysis. Therefore, this chapter presents the research design and its methodology which were used to carry out the study. It describes the research design, the target population and sampling methods and sample size. Besides, it covers the research instruments and the procedure for collecting the data for the study

### 3.2. Research design

Research design helps researchers to provide data that can answer the research questions or attain the research objectives. There are many types of research designs, depending on the types of data that the researcher want to collect and analyze. However, because of the study expected to investigate on the determinants of internal audit effectiveness in local administration offices, explanatory research design which utilizes quantitative research methods along with correlation and regression analysis was used to explain the effects of independent variables on internal audit effectiveness of local administration offices.

### 3.3. Population of the study

The targeted populations of the study were all the internal audit staffs and a top manager of Oromia's selected western zones local administration offices. The logic behind selecting the population is that internal audit staffs and top managers have direct contact with the work and are the direct link to provide information regarding the internal audit effectiveness of the offices. Therefore, the target population who participated in this research was three Oromia western zones and two woredas purposively selected from each zones. The method of selecting the zones and woredas was purposive and it's based on their closeness to each other so that the researcher can distribute and collect the questionnaire from the respective respondents.

### 3.4. Sample size and Sampling technique

Sampling is the process or technique of selecting a suitable sample for the purpose of determining parameters or characteristics of the whole population. Most data were collected using a sample. From the researcher's preliminary study the total number of internal auditors in each selected local administration offices are minimum of twelve in both zone and woredas local administration offices.

The sampling technique of this study constituted by 129 respondents of selected local administration offices, 9 top manager and 120 internal Auditors.

### 3.5. Source of data and Data collection method

The study is used primary data and data were collected through structured questioners. And primary data was collected from top management and internal audit staff members of selected local administration offices. The questionnaires were administered to the internal auditor staffs to obtain quantitative data. The items in the questionnaire requests the perception of the respondents' regarding the internal audit system in the local administration and also the internal audit system and its compliance with rules and regulation of offices as well as regulatory body requirements.

The questionnaires was adopted and modified from the prior author and literature review (Shiferaw Yisasu, 2017; Shewamene Hailmariam, 2014; Sisay Gebre. 2018; and Mihret and Yismaw, 2007). The questionnaires were prepared in the form of Likert-Scale type by constructing into five point scale where the highest scale represent strongly agree and the lowest scale represent strongly disagree (Likert, 1932). The questionnaires distributed to the respondent are organized in to two parts; the first part comprises the demographic question regarding the respondents, and the second part contains items relating to the effectiveness of Internal Audit and its determinants.

### 3.6. Data analysis method

Data analyses were conducted through a descriptive statistics, correlation and regression analysis to provide details regarding the demographic question and the various factors that affect the effectiveness of Internal audit in local administration offices. The descriptive method of data analysis was important to analysis the demography of the sample in population at the study area in terms of age, educational background, work experience etc. of the respondents using the descriptive methods of statistical analysis like percentage, measures of central tendency and measures of dispersion.

Statistical Package for Social Sciences (SPSS) version 20 and Excel was used to analyze data collected to evaluate the effects of variables on the effectiveness of internal auditors. Before, conducting the analysis to insure reliability and consistency of the instrument the Cronbach's Alpha ( $\alpha$ ) test were made. Correlation and regression analysis method were used to determine the relationship among the variables and to test the research hypothesis by meeting the ordinary least square (OLS) assumptions of the linear regression.

### 3.7 Model specification

The following model is formulated for this research in order to test the research hypothesis set earlier. The goal of this analysis was to know the level to which internal audit effectiveness is determined by Independence of internal audit, auditors proficiency, Management Support, information technology and Approved Internal Audit manual by considering R square value, beta coefficient and P-value for the significant of the relation. Therefore the following model was formulated for this research in order to test the research hypothesis developed.

$$IAE = \alpha + \beta_1 IAID + \beta_2 IAP + \beta_3 MS + \beta_4 IT + \beta_5 AIAM + e_i$$

Where:

IAE → the effectiveness of internal auditors' in identifying non-compliance activities and the added contributions of IA to the public sector offices,

IAID → Internal auditor independence,

IAP → Internal auditors Proficiency,

MS → Managements Support,

ITI → Information technology

AIAM → the existence of approved internal audit manual,

$\alpha$  → is a constant, represents the effectiveness of IA when every independent variables are zero.

$\beta_{1-5}$  → is the coefficient, in which every marginal change in variables on internal auditor's effectiveness affects correspondingly.

$e_i$  → the error term



## CHAPTER FOUR

### 4. Research Findings: Analysis and Discussion

#### 4.1. Introduction

This chapter describes data analysis and interpretation part. As indicated in the previous chapter, the main attempt of this study is to investigate the determinants of internal audit effectiveness in selected local administration office. Therefore, this chapter presents the analysis and discussions for research findings obtained from the questionnaires. It reports the investigation results obtained from top managers and internal auditors of the local administration 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 and finally the results of hypothesis testing are presented.

#### 4.2. Descriptive Statistics

##### 4.2.1. Response Rate

The questionnaires were distributed to both the top managers and the internal auditors of the selected local administration offices. Out of the total 129 set of questionnaires 116 questionnaires were returned, yielding 89.92% response rate. This shows good response rate both for the managers and internal auditors. Therefore, this response rate was good enough to make conclusions for the study and found to be satisfactory to carry on the analysis with the current number of respondents to reach on certain conclusion about the subject under study.

#### 4.3 Demographic Characteristics of the Respondents

In the following table, the demographic information of respondents is presented. These include the level of education, work experience of respondents and duration of organization in operation. To get information on these subjects the respondents were asked a designed question and their responses are presented and analyzed as follows. The results of this survey processed using the SPSS software.

Table 4.3.1 Demographic characteristics

Demographic questions		Frequency	Percentage
Gender	Male	69	59.5
	Female	47	40.5
	Total	116	100
Age	20-29	17	14.7
	30-39	35	30.2
	40-49	34	29.3
	50-59	22	19.0
	Above 60	8	6.9
	Total	116	100
Field of study	Accounting	52	44.8
	Management	38	32.8
	Economics	26	22.4
	Total	116	100
Level of Education	Diploma	23	19.8
	Degree	58	50.0
	Masters	35	30.2
	Total	116	100
Years of experience	2-5yaers	25	21.6
	5-10 years	48	41.4
	Above 10 years	43	37.1
	Total	116	100

(Source: Questionnaire and SPSS output)

### Summary of respondent’s demography

**Gender:** The study sought to establish the Gender, Age Brackets, Level of Education, Field of study, and Service year of the respondents. The studies found that gender of the respondents were 59.5% Males and 40.5% Females respectively. This implies that both genders were involved highly in the study and thus the finding of the study did not suffered from gender bias.

**Age:** The study requested the respondents to indicate their age category, the findings revealed that 14.7% of the respondents were aged between 20 to 29 years, 30.2% of the of the respondent indicated they were aged between 30 to 39 years, 29.3% of the respondents indicated were aged between 40 to 49 years, the other 19% of the respondents indicated were aged between 50 to 59 years, whereas the remaining 6.9 % of the respondents indicated that they were aged above 60 years. This is an indication

that respondents were well distributed in terms of their age bracket. The age bracket implies that the respondents were comprised of heterogeneous groups; which in turn enabled the researcher to get varied responses across the sample units fairly distributed. Hence, again the study did not suffer from age bracket bias.

**Level of Education:** The study also requested the respondents to indicate their highest level of education and from the findings it was recognized that 19.8% of the respondent indicated their highest level as Diploma, 50.0% of the respondent indicated their highest level as Bachelor's Degree, and the remaining 30.2 % of the respondents indicated their highest level of education as Master's Degree. It is identified that most of the respondents included in the study had Bachelor's Degree. So, the respondents are capable to understand the concepts used to measure variables of the study and to rate the statements accordingly.

**Field of study:** The response to the questionnaires revealed that educational background of the respondents comprises of Accounting 44.8%, Management 32.8%, and Economics 22.4 % respectively. Here, the majority of respondents studied accounting followed by management and economics fields respectively which shows their knowhow with the subject matter addressed in the study.

**Years of experience:** Finally, the study requested respondents to indicate the number of service years they had served for in the office. The study revealed that 21.6% of the respondents had worked for a period ranging 2 to 5 years, 41.4% of the respondent indicated that they had worked for a period ranging between 5 to 10 years, and the rest 37.1% of the respondents indicated that they had worked for a period of more than 10 years. This implies that the Respondents have remarkable work experience in view of the fact majority of them have 5-10 years and above 10 years work experience.

#### 4.4. Scale Reliability Test

One of the foremost popular reliability statistics in use today is Cronbach's alpha (Cronbach, 1951). Cronbach's alpha determines the internal consistency or average correlation of items in a survey instrument to gauge its reliability. Scale reliability test is done to check whether a scale applied in this research consistently reflect the subset it measures. To carry out the reliability analysis, Cronbach's Alpha ( $\alpha$ ) 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). The Cronbach's  $\alpha$  is computed using SPSS package 20 (Statistical Package for Social Sciences) and was found to be more than 0.70 that was 0.783. Therefore, the Cronbach's Alpha ( $\alpha$ ) generated in below

table show that the responses generated for all of the variables’ used in this research were reliable enough to do further analysis.

Table 4.3.2 Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.742	.783	35

Sources: survey data, 2020 SPSS output

#### 4.5. Internal Audit Effectiveness

Table 4.3.3 Internal Audit Effectiveness

Internal Audit Effectiveness	N	Mean	Std. Deviation
The existing role that the internal audit is playing sufficient enough to deal with the very purpose for which it’s established	116	4.03	.645
Internal Auditors provide useful recommendations and constructive criticisms on non-compliances activities or control systems of the office.	116	3.94	.998
The Organization Internal Audit finding & recommendations are critical & constructive to enhance non-compliances activities or control systems of the office.	116	3.75	.812
The non-compliance reports provided by internal audit are reliable and significant to the office.	116	3.87	1.108
The internal auditors believe to issue audit report because they’re capable to work out the character and frequency of noncompliance activities.	116	3.78	1.088
Internal audit ensures the economical, effective and efficient use of the office resources.	116	3.55	.888
The number of complaints (doubts) about the internal auditors’ finding (report) is extremely low because their report is correct and reasonable.	116	4.19	.779
The recommendations of internal audit department provide practical, cost-benefit solutions for correcting the issue that were found.	116	3.63	1.234

Internal auditors have the experience and expertise to deal with risk management problems within the office.	116	3.38	.966
The existence and findings (reports) of Internal Auditors meet the expectations.	116	3.76	.809
The internal auditor reports are highly considered for deciding and internal controls by the management.	116	3.99	1.161
The office internal audit ensures activity performed is in compliance with established policies, procedures, laws and regulations.	116	3.92	.997
Total Item Mean	3.81		

Source: Questionnaires and SPSS output (2020)

The overall average mean score for internal audit effectiveness depicted in the above table is 3.81 it shows that there is moderate internal audit effectiveness in local administrations selected under study area. (Lenz, R. 2013) revealed that the effectiveness of internal audit as a concept based on risk management, internal control, and organizational governance can add value to the organization and help to improve organizational processes. The effectiveness of internal audit in this study is constructed on the extent to which internal audits can perform its functions in accordance with the established goals.

#### 4.5.1 Internal Audit Independency

Table 4.3.4 Internal Audit Independency

Internal Audit Independency	N	Mean	Std.Deviation
Auditor performs the auditing activities with none interference from anybody and with none influence from the office.	116	3.84	.894
Internal auditor can freely decide the scope, time and extent of auditing procedures supported auditing standards and therefore the office's policy.	116	3.92	1.014
Internal auditors are objectively examine auditing issues only meeting on reliable audit evidence and no management interest is involved for adjustment beyond auditing standards & values.	116	3.69	1.008

Internal auditor can freely access necessary documents, information and data about the office for the audit work.	116	3.73	1.050
Internal auditor is happy to incorporate any audit finding in his/her audit work and report on to responsible body.	116	3.84	.956
Total Item mean		3.80	

Source: Questionnaires and SPSS output (2020)

The overall average mean value of internal audit independence as shown in the above table is above the mid value of five point Likert scale questions. The result shows that there were no threats to internal audit independency in local administration offices selected in the study. Bou-Raad (2000) argues auditors independency incorporate independency both in mind and appearance. Independence of mind requires the auditor to have a kind of mind that allows the expression of opinion without being affected by influences that compromise professional judgment, allowing an individual to act with integrity and exercise objectivity and professional skepticism. While Independence in appearance requires the auditor to eschew instances that will cause others to conclude that they are not maintaining an unbiased attitude and an objective of mind.

#### 4.5.2. Auditors proficiency

Table 4.3.5 Auditor's proficiency

Auditors proficiency	N	Mean	Std. Deviation
Internal auditors have adequate professional knowledge on the general activities of the department.	116	3.97	.894
Internal auditors undertake continuous professional development activities (such as association sponsored programs and correspondence courses)	116	3.76	1.169
Internal auditors are capable in techniques on control assessment and risk analysis	116	3.53	1.099
The work of internal audit is performed with modern technology that uses computerized data tools and specific IA software	116	3.74	1.031

Internal auditors undertake continuous professional development training per annual.	116	3.76	1.060
Total Item mean	3.75		

Source: Questionnaires and SPSS output (2020)

The summative score of questionnaires designed for internal auditors proficiency as indicated in the above table revealed that internal auditors of the office possess necessary skill, educational background, information technology knowhow, and the availability of relevant trainings fare found important for the internal audit team to become effective in their task accomplishments. The overall mean value 3.75 show that the findings of the study is consistent with Morgan (2009) who argues that the proficiency of internal auditors is important in promoting good governance and ensuring effective utilization of resources. Professional proficiency is the expertise, specialized knowledge and abilities showcased in a field in which one is practicing professionally. Staff of an Internal Audit unit should have the requisite education, training and experience to conduct the full range of audits required by its mandate. Quality of audit work embodies the extent of excellence in the audit work which is normally attained when the audit work is performed according to Internal Audit standards. The above result illustrate that the Internal Auditors do possess professional skill to understand the organizations system.

#### 4.5.3. Management Support

Table 4.3.6 Management Support

Management Support	N	Mean	Std. Deviation
Senior management supports internal audit to perform its duties and responsibilities.	116	3.72	.976
Senior managers understand and fully support the work of internal audit	116	4.00	.987
Internal auditors have full access to records and knowledge they have in conducting audits.	116	3.71	.951
Management supports Internal auditors by providing training so as to enhance their skill and update with the sector.	116	3.75	1.078

The office supports Internal Auditing staffs by budgeting funds for certification to possess relevant education in auditing that permits them to audit all of the office systems.	116	3.83	1.041
Total Item mean	3.80		

Source: Questionnaires and SPSS output (2020)

The overall average mean value of top management support for internal audit work is 3.80, which is near to the upper limit of five scale Likert scale question average mean time. This implied that the overall average response for the management support have got relatively high rate as explained by mean scores of items used to measure management support in the offices. 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 internal audit. Therefore, the result tells us that the support given by local administration offices top management to internal audit work is attractive.

#### 4.5.4. Information technology

Table 4.3.7 Information technology

Information technology	N	Mean	Std. Deviation
Software system such as: financial management data system, integrated budget and expenditure, et al. are a part of the scope of the interior Audit activity.	116	3.10	1.006
Internal Auditors sufficiently utilize information technology like computer assisted audit tools in their audit work.	116	3.65	.971
Availability of sufficient resources for information technology has positive effect on effectiveness of Internal audit activity.	116	3.92	.934
Internal auditors have enough skill to use computer assisted tools and technologies in their audit testing.	116	3.03	1.079
Total Item mean	3.43		



Source: Questionnaires and SPSS output (2020)

Global Internal Audit Common body of data (2015) reported that only 38% of the chief audit executives said their organizations are using technology at an “appropriate” level or higher while nearly 23% of the chief audit executives said their organizations relied on manual system and process in internal audit. Therefore organizations need to shift from the use of manual accounting system to use of Information technology and employ accounting software like quick books in recording their daily business transaction. Similarly, the response from local administration offices show an overall mean value of 3.43 in availability and use of information technology which indicates availability of information technology towards effectiveness of internal audit was positive.

#### 4.5.5. Approved Internal Audit manual

Table 4.3.8 Approved Internal Audit manual

Approved Internal Audit Charter	N	Mean	Std. Deviation
The office maintain internal audit Charter that defines the role, purpose, authority and responsibility, within the organization, according to the Definition of Internal Auditing, the code of ethics and therefore the Standards.	116	3.98	.951
The Charter clearly defines internal audit's role in evaluating and contributing to the event of risk management, control and governance processes Internal audit's role in reference to any fraud-related.	116	3.63	1.100
The purpose and authority of internal audit charter is in line with “Standards for the Professional Practice” formulated by the Institute of Internal Auditors.	116	3.84	1.100
The IA charter specifies the interior audit activity's position within the office; authorized access to records, personnel, and physical properties relevant to the performance of engagements.	116	3.62	.920
<b>Total Item Mean</b>		<b>3.77</b>	

Source: Questionnaires and SPSS output (2020)

An approved internal audit manual is the fifth variable of this study and the finding of the study revealed that the overall average mean value of an approved internal Audit manual is 3.77 which are above the mid mean value of five point Likert scale. All the questions under this category have got

mean scores of each 3.98, 3.84, 3.63, 3.62; The office maintain internal audit manual that defines the role, purpose, authority and responsibility, within the organization, consistent with the Definition of Internal Auditing, the code of ethics and the Standards, The manual clearly defines internal audit's role in evaluating and contributing to the development of risk management, control and governance processes Internal audit's role in relation to any fraud-related, The purpose and authority of internal audit manual is in line with "Standards for the Professional effectiveness" formulated by the Institute of Internal Auditors, the IA charter specifies the interior audit activity's position within the office; authorized access to records, personnel, and physical properties relevant to the performance of engagements, respectively. The result implied that the overall average response for presence of Approved Internal Audit manual was good.

#### 4.6. Correlation and Regression analysis

##### 4.6.1. Correlation Analysis

Table 4.6.1 Correlation Analysis

##### Correlations

		IAE	IAID	IAP	MS	IT	AIAM
IAE	Pearson Correlation Sig. (2-tailed)	1					
IAID	Pearson Correlation Sig. (2-tailed)	.631** .003	1				
IAP	Pearson Correlation Sig. (2-tailed)	.502 .023	.248** .007	1			
MS	Pearson Correlation Sig. (2-tailed)	.406* .041	.351* .026	.209* .024	1		
IT	Pearson Correlation Sig. (2-tailed)	.216* .027	.431* .046	.346* .017	.273** .031	1	
AIAM	Pearson Correlation Sig. (2-tailed)	.542* .033	.218* .019	.235** .010	.183* .049	.324* .020	1

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

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

The Pearson correlation coefficients of the variables indicate that there is a positive significant relationship between the predicted Variable and predictors. The above correlation coefficients depict the correlation between the independent variables and also with the dependent variables. Pearson Correlation

Coefficient (r) measures how well the regression equation truly represents the set of data. The quantity r, called the linear correlation coefficient, measures the strength and the direction of a linear relationship between two variables. The value of r is such that  $-1 < r < +1$ . The + and – signs are used for positive linear correlations and negative linear correlations, respectively. As it's shown in the above table the Pearson correlation coefficient indicate that there is a positive significant relationship between the dependent Variable (IAE) and all independent variables (IAID,IAP,MS,IT and AIAM), with correlation coefficient of 0.631, 0.502, 0.406, 0.216, and 0.542 respectively. These shows that all independent variables are positively affect internal audit effectiveness of local administration offices.

#### 4.6.2. Regression analysis

##### 4.6.2. Ordinary Least Square (OLS) Assumptions Tests

###### 4.6.2.1 Normality Test

Kolmogorov- Smirnova and Shapiro-Wilk tests of normality were used and conducted on SPSS 20to test the normality of data. 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 or If the Sig. value of the Shapiro-Wilk Test is greater than 0.05, the data is normal. If it is below 0.05, the data significantly deviate from a normal distribution. The results of test showed in table below indicate that all variables were found to be normal and the presence of normality was accepted at  $p > 0.05$ .

Table 4.6.2Normality Test

Variables	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Internal Audit Effectiveness	.101	116	.189 <sup>*</sup>	.853	116	.123
Auditors Independency	.062	116	.213 <sup>*</sup>	.742	116	.179
Auditors proficiency	.098	116	.061	.931	116	.225
Management support	.131	116	.052	.867	116	.124
Information technology	.087	116	.198 <sup>*</sup>	.953	116	.183
Approved audit manual	.092	116	.177 <sup>*</sup>	.836	116	.257

a. Lilliefors Significance Correction \*. This is a lower bound of the true significance.

Source: Survey data, 2020 SPSS output

#### 4.6.2.2. Multicollinearity Test

Multicollinearity analyses were done to identify the unique contribution of each variable in predicting the dependent variables. Multicollinearity is detected with the help of tolerance and its reciprocal, called variance inflation factor (VIF). If the value of tolerance is less than 0.2 or 0.1 and, simultaneously, the value of VIF 10 and above then the Multicollinearity is problematic (Field, 2009; Myers, 1990; Pallant, 2007). 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. As shown in the Collinearity table, the tolerance levels for all variables are greater than 0.2 and the VIF value are less than 10 which indicates that there were no Multicollinearity problems that alters the analysis of the findings, rather it leads to the acceptance of tolerance and VIF values for the variables.

Table 4.6.3 Collinearity Statistics

Variables	Collinearity Statistics	
	Tolerance	VIF
Internal auditors independence	.532	1.127
Internal Auditors Proficiency	.625	1.116
Management support	.431	1.083
Information Technology	.694	1.002
Approved internal audit manual	.723	1.094

#### 4.6.2.3. Autocorrelation Test

Autocorrelation refers to the degree of correlation of the same variables between two successive time intervals. It measures how the lagged version of the value of a variable is related to the original version of it in a time series. The Durbin-Watson statistic is commonly used to test for autocorrelation. The outcome of the Durbin-Watson test ranges from 0 to 4. An outcome closely around 2 means a very low level of autocorrelation (Field, 2009). An outcome closer to 0 suggests a stronger positive autocorrelation, and an outcome closer to 4 suggests a stronger negative autocorrelation. 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). The test value of Durbin-Watson in this is 1.52 which is closely around 2, so, it suggests that there is no severe autocorrelation among error terms.

### 4.6.3 Regression Results and Hypothesis Testing

The next step up after correlation is linear regression. Linear regression was used to predict the value of internal audit effectiveness (IAE) based on the value of other independent variables. The regression result that are obtained by regressing the internal auditors effectiveness in identifying non compliance activities and the internal auditors ability in adding value for their offices on the Internal auditors Independency, Auditors proficiency, Management support, Information technology, and the existence of approved internal audit manual were analyze and reported. Finally, the hypothesis tests were undertaken based on proposed hypothesis and the regression output results.

Table 4.6.3.1 Model Summary

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R <sup>2</sup> Change	F Change	df1	df2	Sig. F Change	
1	.734	.624	.601	.3502	.524	7.531	5	110	.003	1.523

a. Predictors: (Constant), Internal auditors independence, Internal Auditors Proficiency, Management support, Information Technology, Approved internal audit manual

Source: Survey data 2020 SPSS out put

As observed from the above model summary, Regression analysis generates an equation to describe the statistical relationship between one or more predictor variables and the response variable. The above model summary indicate that the overall independent variables to the internal audit effectiveness accounts for 62.4% of the variation in the internal audit effectiveness, which is very acceptable on social science studies. The result show that the model is best fit and significant at P=0.003 and F=7.531 which implies that there were strong relationship between the predictors and the outcomes of the regression variable.

Table 4.4.5 Regression result

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	Collinearity Statistics
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	B	Std. Error	Beta			Tolerance	VIF
(Constant)	50.027	4.679		3.809	.000		
IAID	.108	.166	.365	5.655	.003	.532	1.127
IAP	.074	.243	.217	4.517	.000	.625	1.116
MS	.120	.150	.478	2.799	.002	.431	1.083
IT	.040	.153	.253	1.260	.036	.694	1.002
AIAM	.145	.182	.579	3.797	.001	.723	1.094

a. Dependent Variable: IAE Source: Survey data 2020 SPSS out put

To test the hypotheses of the study, the p-value for each variable were used. A low p-value ( $< 0.05$ ) indicates that the null hypothesis was rejected. In other words, a predictor that has a low p-value is likely to be a meaningful addition to the model because changes in the predictor's value are related to changes in the response variable. Conversely, a larger (insignificant) p-value suggests that changes in the predictor are not associated with changes in the response.

In the above output, we can see that all predictor variables, internal auditors independency, Auditors proficiency, Management support, Information technology, and Approved internal audit manual are significant because their p-values are less than the common alpha level of 0.05, which indicates that they are statistically significant. As shown in the above table the beta sign of all independent variables shows there is a positive effect of independent variables over the dependent variables. The finding is consistent with most of the previous studies that are identified in this paper (ShewameneHailmariam (2014), Mihret and Yismaw, 2007; Cohen & Sayag, 2010; Arena and Azzone, 2009; Al-Twajjry et al. 2004).

The beta and P value of each independent variables, meaning, Internal auditors independency, Auditors proficiency, Management support, Information technology, and Approved internal audit manual are: p-value= 0.003 &  $\beta = 0.108$ , p-value= 0.000 &  $\beta = 0.074$  , p-value= 0.002 &  $\beta = 0.120$ , p-value= 0.005 &  $\beta = 0.040$ , p-value= 0.001 &  $\beta = 0.145$  respectively. From this we can infer that there are a positives and significant relationship between independent variables listed and internal audit

Effectiveness. The result shows that the finding is consistent with the finding of Mihret and Yismaw (2007) Cohen and Sayag (2010) Alzeban and Gwilliam (2014).

#### 4.6.4. Summary of Hypotheses Tests

The regression results obtained from the model were utilized to test the hypotheses. The hypotheses sought to test for a significant influence of internal auditor's independency, Auditors proficiency, Management support, Information technology, and approved internal audit manual on the direct effect to internal audit effectiveness. As it can be observed from the above table the p value for all independent variables are statistically significant at ( $p < 0.05$ ) which suggests a strong support for hypothesis developed in the study. Based on the regression results of the internal audit effectiveness obtained from the regression output the following hypotheses tests were conducted.

H1: Internal auditors independence affects the Effectiveness of Internal Audit.

Independence of internal audit is one of independent variable which was taken in this study as a determinant of internal audit effectiveness. As clearly shown on the regression result the beta value of independency of internal audit variable is  $\beta = 0.108$ , with a significant P value of  $< 0.05$ , from this we can infer that the Independence of internal audit is positively and significantly impacted the effectiveness of internal audit. Therefore, the first hypothesis of the study, H1: Internal auditors independence affects the Effectiveness of Internal Audit is accepted. This finding is consistence with the previous studies conducted by (Cohen, & Sayag, 2010; Van Peurse, 2005) they find that, the more organizational independence to the internal auditors plays the vital role in assurance of internal audit effectiveness by 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 Internal Audit effectiveness in their offices. Hence, the first hypothesis of the study was accepted

H2: Professional proficiency of internal auditors affects effectiveness of internal audit.

The professional proficiency of internal audit staff also supposed to be the determinants of internal audit effectiveness and is the second hypothesis of this research. The regression result highly supports this hypothesis at ( $P < 0.01$ ) level of significant and with the positive signs of beta ( $\beta = 0.074$ ). But, this result was inconsistency with some previous auditing researches (Arena and Azzone, 2009; Cohen and

Sayag, 2010) they argued that there were no correlation between professional proficiency and adequacy with the Internal Audit effectiveness. But the previous research was conducted in terms of the number of internal auditors, professional certification and level of education, whereas this research was conducted the effects of IA by considering the overall abilities of the internal auditor staffs and the availability of adequate and certified internal auditors in terms of their performance to proceed the required auditing activities by matching with the audit standards and organizational objectives by using modern technologies when compared to those previous studies.

So, professional proficiency of internal auditors has positive relationship with Internal Audit Effectiveness and contributes for the Internal Audit Effectiveness by enabling the internal auditors performing their activities on time, cover the planed scope of auditing activities by using the computerized data tools and specific IA software. This results with the overall contribution of internal audit effectiveness and its positive relationship with IAE leads to highly support to the proposed hypothesis so that the second hypothesis H2: Professional proficiency of internal auditors affects effectiveness of internal audit was accepted.

H3: Support from top management affects the effectiveness of internal audit.

Regression analysis was done In order to see the effect of management support on the internal audit effectiveness and its output shows a beta value of  $\beta = 0.120$ ,  $P = 0.002$ ; from this figure we can conclude that the internal audit effectiveness is directly and significantly impacted by the support the audit team received from the management. This result were consistent with the previous auditing research works of (Mihret and Yismaw, 2007; Cohen and Sayag, 2010) they find that the top management support was the critical determinants of internal audit effectiveness. It is the management who shapes the organization strategic move and if they see internal audit as a strategic point for the organization they will provide all the necessary input for the successful accomplishment of internal audit. The management can 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 effectiveness of the internal audit work.The result strongly supports the proposed hypothesis so that the third hypothesis was accepted.



H4: The presence of Information technology resource affects the effectiveness of internal audit.

The other independent variable which was taken in this study as a determinant of internal audit effectiveness is the availability of information technology. As clearly observed from the correlation coefficient and regression result the beta value of information technology variable is  $\beta = 0.040$ , with a significant P value of  $= 0.036$ , from this we can infer that the information technology is positively and significantly impacted the effectiveness of internal audit effectiveness. The finding is consistent with the work of (Sisay gebrie, 2018). Availability of varied types of IT would have positive influence to undertake effective internal audit activities. New IT systems enabled internal auditing to provide management with more relevant information at lower cost and without delay by automated processes, real time facilities and integrated internal auditing (Shin et al., 2013; Sobel and Kapoor, 2012). Therefore the fourth hypothesis of the study H4: The presence of Information technology resource affects the effectiveness of internal audit has accepted.

H5: The availability of approved internal audit manual affects the effectiveness of internal audit.

The Fifth hypothesis which is proposed to support the effectiveness of internal audit is the existence of approved internal audit manual in the local administration offices. A well drafted IA charter may be a crucial ingredient for the successful internal auditing functions. Internal Audit manual is the formal document that writes detail about the main purpose of internal audit, right, and obligation, reporting line, authority and code of ethics that internal auditor should have. In general, this document is approved by the audit committee and the board of directors. This document doesn't only helps other departments, executive officers also as board of directors to know what internal audit activities are but also help the interior auditors themselves to know what are their scope, right, responsibilities and reporting line. The regression output result also supports this hypothesis with significantly correlated variables with the level of significance ( $p=.001$ ) and the positively related coefficients ( $\beta=0.145$ ) contributes for the internal audit effectiveness. The result of this hypothesis was consistent with the prior audit researches conducted by (Peurseem, 2005; O'Regan, 2002). According to the authors a well drafted IA charter helps the internal audit function to perform its roles of management influence objectively and used as a way of getting access to the information (documents, records, systems, and personnel) that are necessary to perform and reach conclusions on the work. The MoFED (2004) also directs all the public offices to have approved IA manual that are used as a working guide. This strongly supports the proposed hypothesis of the positive relationship between the availability of AIAM and its

significant impact for the internal audit effectiveness. Therefore, the fifth hypothesis of the study H5: The availability of approved internal audit manual affects the effectiveness of internal audit was accepted.

## CHAPTER FIVE

### 5. Summery, Conclusion and Recommendation

#### 5.1 Introduction

The final chapter of this study mainly contains major finding of the study, Conclusion, recommendation, and implications for further research. In line with the objective of the research to identify the determinant factors of internal audit Effectiveness in local administration offices, study applied explanatory research design which utilizes quantitative research methods along with correlation and regression analysis to explain the effects of independent variables on internal audit effectiveness of local administration offices. Questionnaires were adopted to gather firsthand information from the respondents with heterogeneous age bracket, education level, field of study, and service period. Questionnaire, which had developed in the form of five point Likert-scale was used to assess the responses of sample respondents (auditors and top managers) about issues of factors determine internal audit effectiveness. Then, reliability and validity test was conducted in order to check the inconsistency of the data. As the reliability test confirmed the consistency of the data for the analysis, the collected data from the respondents was analyzed using SPSS. And also, ordinary lest square assumptions test were made for the regression analysis part. The data was presented using descriptive statistics followed by correlation and regression analysis to test the hypothesis of the study.

#### 5.2 Summary of major findings

The following findings were noted based on the analyses of information presented in the above chapter four. The study revealed that the local administration offices studied has moderate internal audit Effectiveness. According to the regression output all the predictors of the study were positively contributed for the effectiveness of internal audit functions in local administration offices. The positive influence suggests that, if the auditor independence, professional proficiency, management support, information technology and approved internal audit manual are maintained in the office, it will increase the effectiveness of the internal audit. It implies that the predictors of the study have a very important role in enhancing the effectiveness of the internal audit on local government administration office. Therefore, the offices should give emphasis to use these determinant variables to make their service delivery effective, efficient and economical throughout their offices.

According to the regression output the composite measure of all independent variables accounts for 62.4% ( $R^2 = .624$ ) variance for the IA effectiveness in identifying noncompliance activities and added contributions to the local administration offices. The result shows that the impact of these five independent variables contributed for the dependent variable internal audit Effectiveness were 62.4%.

The study revealed that there is an opportunity for auditors independence in terms of accomplishing task without interference, independence in decision making regarding the audit findings, and accessing the necessary documents to uncover. This helps to promote and communicate their added value for the effectiveness of internal audit work in their office contributes for the IA effectiveness.

The research shown that, the management recognizes awareness about the subject matter, encouragement of the internal audit team, giving recognition, and appreciations are important for the internal audit team to become effective in their task accomplishments. According to the findings of the study, internal audit staffs of local administration offices are skilled with the necessary educational background.

Based on the hypothesis test result, the predictor variables, internal auditor's independency, Auditors proficiency, Management support, Information technology, and approved internal audit manual have a positive and significant effect on internal audit effectiveness of local administration offices. As it can be observed from the regression result above the p value for all independent variables are statistically significant at ( $p < 0.05$ ) which suggests a strong support for hypothesis developed in the study.

### 5.3 Conclusion

Local government administrations rely on a number of funding sources including state and federal governments as well as their community constituents to enable them to provide a range of public services. Given the constraints on these funding sources the offices need to have in place a range of strategies and policies capable of providing good governance and must appropriately discharge their financial accountabilities. To assist local government administrations with meeting their governance and accountability obligations they often seek guidance from their key stakeholders.

Also, in order to improve the governance and accountability of the local government administration, it is important to have Effective internal audit function for improving public confidence in their financial reporting. Because, the existences of effective internal audit in the office links with internal control risk management system, improves organizational efficiency and effectiveness, reduce information asymmetry during decision making, and ensures internal reliability of financial reporting process. By

taking this aspect into consideration, this study was identified factors that determine the Internal Audit effectiveness in local government administration offices. And also based on descriptive output and result of hypotheses test the following conclusions were drawn.

- A. The Internal Audit effectiveness of the organization increases when, factors determining internal audit effectiveness such as: internal audit independency, internal auditor's proficiency, more supports from the management, information technology infrastructure, and approved Internal Audit manual were maintained in the office.
- B. The regression analysis shows very strong contributions of existence of internal audit independency, internal auditor's proficiency, more supports from the management, information technology infrastructure, and approved Internal Audit manual for the Internal Audit Effectiveness. Therefore, the overall effect of this variable is very important for the internal audit effectiveness in local administration offices.
- C. In addition, the correlation analysis has shown that all independent variables have direct effect on the internal audit effectiveness and the regression result also depicts all the independent variables have a positive sign of coefficients with internal audit effectiveness in the offices.
- D. The regression result of the study has shown that the existence of predictor's variables in local administration offices is very important for the Internal Audit Effectiveness in the offices, because they have a positive sign of beta and contribute for the 62.4% of the variances for the Internal Audit effectiveness. Therefore, neglecting those variables in the office leads to decrease effectiveness of internal audit in the offices.

#### 5.4. Recommendations

Based on the research findings and achieved results with regard to the main objective of this study to identify the major determinants of Internal audit effectiveness in the local administration offices and also to prove the hypotheses, the following recommendations were provided to the stake holders.

- A. The finding of this study proved that the predictor variables were positively related and statistically significant with the Internal Audit Effectiveness in the local administration offices. Therefore, management should not undermine the contributions of those variables which are internal audit independence, Auditors professional proficiency, management support, information technology, and

approved internal audit charter that were positively related and statistically significant with the Internal Audit Effectiveness to enhance internal audit effectiveness in the offices.

- B. In order to uphold effective internal audit in their offices, at the outset, the management should give more autonomy to the internal audit by minimizing interferences, availing documentation whenever required and giving them permission for access to any information or documentation needed in the office /departments. The management should also enhance the autonomy of the internal audit by ensuring enough budgetary allocation.
- C. Secondly, the study recommends that the management should ensure that the internal auditors are recruited in their right proportion with necessary skills so as to increase proficiency of internal auditors in the offices. The management should also enhance the development of the internal auditors by organizing more seminars and workshops where they could enhance their audit skills, and recruit more adequate and competent IA staff and give sufficient training and professional certification for the existing IA staffs.
- D. Thirdly, the management should put more emphasis on the support received by the internal auditors especially in the areas of the adoption of the audit reports as it is the only way to gauge the effectiveness of the internal auditors and even to enhance fraud detection in the offices. And also, the management should facilitate information technology infrastructures and providing software trainings to internal auditors to maintain effective internal audit in their offices.
- E. Finally, the local administration offices should maintain approved internal audit manual to enhance their internal audit effectiveness, and also internal audit staffs of the local administration offices recommended to work in accordance with the available internal audit charters, it helps the internal auditors to provide the appropriate reports and to know the extent of their relationships with the managements, briefly describes the rights and duties of Internal Auditors and the others.

## 5.5 Limitation and Implications for Further Research

This study was limited to selected local government administration offices. Thus, the generalisability of the findings and the conclusions drawn may concern, though; the study does provide evidence of the determinant factors of internal audit effectiveness in local government administration offices. The study was focused on determinants of internal audit effectiveness includes: Internal auditor's independency, proficiency, management support, information technology, and approved internal audit charter. So, future research should pay attention to identifying and analyzing other factors that may affect the internal audit effectiveness.

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## Appendix 1: Questionnaires

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

Dear participant, the objective of this questionnaire is to collect information that will help to study the determinants of Internal Audit effectiveness in selected government Authorities, for the partial fulfillment of MSc. degree in Accounting and Finance in Addis Ababa University. You have been selected to participate in this study due to the importance of your information in the study. All data and information that will be gathered through these questionnaires will be used for the sole purpose of the research and remains confidential. Therefore, you are kindly requested to respond to the questions with good confidence, freely and to the best of your knowledge. There is no need to write your name on the questionnaires.

Your honest and thoughtful response is invaluable

Thank you in advance for your cooperation!

With best regards,

Misgana Enkosa

*Phone No. – 251927502526*

*Email: -[misganaenko100@gmail.com](mailto:misganaenko100@gmail.com)*

## Questionnaire Administered to Top Manager & Internal audit staff

Dear respondent, you are kindly requested to give your response to your personal profile and each statement related with the Independency of internal auditors, Professional proficiency of internal auditors, the top management support, Availability of IT in the office, and the approved internal audit charter as provided in the table below.

### A. The personal profiles

**General Instruction: Please indicate your choice by putting “√” mark in the bracket.**

1. Sex/Gender/: Male (\_\_\_\_\_) Female (\_\_\_\_\_)
2. Age (in year): 20 to 29(\_\_\_\_), 30 to 39(\_\_\_\_), 40 to 49(\_\_\_\_), 50 to 59(\_\_\_\_), above 60(\_\_\_\_\_)
3. Your field of study: Accounting (\_\_\_\_\_), Management (\_\_\_\_\_), Economics (\_\_\_\_\_) Other specify\_\_\_\_\_
4. Level of education: TVET certificate (\_\_\_\_), Diploma (\_\_\_\_), Bachelor's Degree (\_\_\_\_), Masters Degree (\_\_\_\_) or others specify\_\_\_\_\_
5. Number of years of experience: Two years and less ( ), above two years less than five years ( ), above five years less than ten years ( ), above ten years ( )

**B.** The questionnaire items are prepared in five (5) point Likert scales. I ask you to tick (√) under the appropriate scale (point) that indicates your opinion in table below. The value of the scale stands as follow:

**5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree**

S.No	The effectiveness of internal auditors' in identifying noncompliance activities and added contributions to the office.	The Scales				
		5	4	3	2	1
1	The existing role that the internal audit is playing sufficient enough to deal with the very purpose for which it's established	5	4	3	2	1
2	Internal Auditors provide useful recommendations and constructive criticisms on non-compliances activities or control systems of the office.	5	4	3	2	1
3	The Organization Internal Audit finding & recommendations are critical & constructive to enhance non-compliances activities or control systems of the office.	5	4	3	2	1

4	The non-compliance reports provided by internal audit are reliable and significant to the office.	5	4	3	2	1
5	The internal auditors believe to issue audit report because they're capable to work out the character and frequency of noncompliance activities.	5	4	3	2	1
6	Internal audit ensures the economical, effective and efficient use of the office resources.	5	4	3	2	1
7	The number of complaints (doubts) about the internal auditors' finding (report) is extremely low because their report is correct and reasonable.	5	4	3	2	1
8	The recommendations of internal audit department provide practical, cost-benefit solutions for correcting the issue that were found.	5	4	3	2	1
9	Internal auditors have the experience and expertise to deal with risk management problems within the office.	5	4	3	2	1
10	The existence and findings (reports) of Internal Auditors meet the expectations.	5	4	3	2	1
11	The internal auditor reports are highly considered for deciding and internal controls by the management.	5	4	3	2	1
12	The office internal audit insures activity performed is incompliance with established policies, procedures, laws, and regulations.	5	4	3	2	1

S. No	Internal Auditors independence	The scales				
13	Auditor performs the auditing activities with none interference from anybody and with none influence from the office.	5	4	3	2	1
14	Internal auditor can freely decide the scope, time and extent of auditing procedures supported auditing standards and therefore the office's policy.	5	4	3	2	1

15	Internal auditors are objectively examine auditing issues only meeting on reliable audit evidence and no management interest is involved for adjustment beyond auditing standards & values.	5	4	3	2	1
16	Internal auditor can freely access necessary documents, information and data about the office for the audit work.	5	4	3	2	1
17	Internal auditor is happy to incorporate any audit finding in his/her audit work and report on to responsible body.	5	4	3	2	1
<b>Internal Auditors Proficiency</b>						
18	Internal auditors have adequate professional knowledge on the general activities of the department.	5	4	3	2	1
19	Internal auditors undertake continuous professional development activities (such as association sponsored programs and correspondence courses)	5	4	3	2	1
20	Internal auditors are capable in techniques on control assessment and risk analysis	5	4	3	2	1
21	The work of internal audit is performed with modern technology that uses computerized data tools and specific IA software	5	4	3	2	1
22	Internal auditors undertake continuous professional development training per annual.	5	4	3	2	1
<b>The Management Support</b>						
23	Senior management supports internal audit to perform its duties and responsibilities.	5	4	3	2	1
24	Senior managers understand and fully support the work of internal audit	5	4	3	2	1
25	Internal auditors have full access to records and knowledge they have in conducting audits.	5	4	3	2	1
26	Management supports Internal auditors by providing training so as to enhance their skill and update with the sector.	5	4	3	2	1
27	The office supports Internal Auditing staffs by budgeting funds for certification to possess relevant education in auditing that permits them to audit all of the office systems.	5	4	3	2	1

	<b>Information technology</b>					
28	Software system such as: financial management data system, integrated budget and expenditure, et al. are a part of the scope of the interior Audit activity.	5	4	3	2	1
29	Internal Auditors sufficiently utilize information technology like computer assisted audit tools in their audit work.	5	4	3	2	1
30	Availability of sufficient resources for information technology has positive effect on effectiveness of Internal audit activity.	5	4	3	2	1
31	Internal auditors have enough skill to use computer assisted tools and technologies in their audit testing.	5	4	3	2	1
	<b>The approved internal audit manual</b>					
32	The office maintain internal audit Charter that defines the role, purpose, authority and responsibility, within the organization, according to the Definition of Internal Auditing, the code of ethics and therefore the Standards.	5	4	3	2	1
33	The Charter clearly defines internal audit's role in evaluating and contributing to the event of risk management, control and governance processes Internal audit's role in reference to any fraud-related.	5	4	3	2	1
34	The purpose and authority of internal audit charter is in line with "Standards for the Professional Practice" formulated by the Institute of Internal Auditors.	5	4	3	2	1
35	The IA charter specifies the interior audit activity's position within the office; authorized access to records, personnel, and physical properties relevant to the performance of engagements.	5	4	3	2	1

Appendix 2: Frequency Table for demographic variables  
Gender of respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
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	Male	69	59.5	59.5	59.5
Valid	Female	47	40.5	40.5	100.0
	Total	116	100.0	100.0	

Age of respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
	20 to 29	17	14.7	14.7
	30 to 39	35	30.2	44.8
Valid	40 to 49	34	29.3	74.1
	50 to 59	22	19.0	93.1
	above 60	8	6.9	100.0
	Total	116	100.0	

respondent field of study

	Frequency	Percent	Valid Percent	Cumulative Percent
	Accounting	52	44.8	44.8
Valid	Management	38	32.8	77.6
	Economics	26	22.4	100.0
	Total	116	100.0	

Education level of respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
	Diploma	23	19.8	7.8
Valid	Degree	58	50.0	57.8
	Masters	35	30.2	87.9
	Total	116	100.0	

Years of Experience

	Frequency	Percent	Valid Percent	Cumulative Percent



Above two years less than five years	25	21.6	21.6	21.6
Above five years less than ten years	48	41.4	41.4	62.9
Above ten years	43	37.1	37.1	100.0
Total	116	100.0	100.0	

### Appendix 3: Descriptive and Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.742	.783	35

### Internal Audit Effectiveness

N	Minimum	Maximum	Sum	Mean	Std. Deviation
116	2	5	468	4.03	.645
116	2	5	457	3.94	.998
116	3	5	435	3.75	.812
116	2	5	449	3.87	1.108
116	2	5	438	3.78	1.088
116	2	5	412	3.55	.888
116	2	5	486	4.19	.779
116	2	5	421	3.63	1.234
116	2	5	392	3.38	.966
116	2	5	436	3.76	.809
116	2	5	463	3.99	1.161
116	2	5	455	3.92	.997
116					

### Internal Audit Independency

N	Minimum	Maximum	Sum	Mean	Std. Deviation
116	2	5	445	3.84	.894
116	2	5	455	3.92	1.014
116	2	5	428	3.69	1.008
116	2	5	433	3.73	1.050
116	2	5	446	3.84	.956
116					

### Auditors proficiency

N	Minimum	Maximum	Sum	Mean	Std. Deviation
116	2	5	460	3.97	.894
116	2	5	436	3.76	1.169
116	2	5	409	3.53	1.099
116	2	5	434	3.74	1.031
116	2	5	436	3.76	1.060
116					

### Management Support

N	Minimum	Maximum	Sum	Mean	Std. Deviation
116	2	5	431	3.72	.976
116	2	5	464	4.00	.987
116	2	5	430	3.71	.951
116	2	5	435	3.75	1.078
116	2	5	444	3.83	1.041
116					

### Information technology

N	Minimum	Maximum	Sum	Mean	Std. Deviation
116	2	5	441	3.10	1.006
116	2	5	423	3.65	.971
116	2	5	455	3.92	.934
116	2	5	468	3.03	1.079
116					

### Approved Internal Audit Charter

N	Minimum	Maximum	Sum	Mean	Std. Deviation
116	2	5	462	3.98	.951
116	2	5	421	3.63	1.100
116	2	5	446	3.84	1.100
116	2	5	420	3.62	.920

## Appendix 4: Regression diagnostic test

## Correlations

		IAE	IAID	IAP	MS	IT	AIAC
IAE	Pearson Correlation	1					
	Sig. (2-tailed)						
IAID	Pearson Correlation	.631**	1				
	Sig. (2-tailed)	.003					
IAP	Pearson Correlation	.502	.248**	1			
	Sig. (2-tailed)	.023	.007				
MS	Pearson Correlation	.406*	.351*	.209*	1		
	Sig. (2-tailed)	.041	.026	.024			
IT	Pearson Correlation	.216*	.431*	.346*	.273**	1	
	Sig. (2-tailed)	.027	.046	.017	.031		
AIAC	Pearson Correlation	.542*	.218*	.235**	.183*	.324*	1
	Sig. (2-tailed)	.033	.019	.010	.049	.020	

### Normality Test

Variables	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Internal Audit Effectiveness	.101	116	.189 <sup>*</sup>	.853	116	.123
Auditors Independency	.062	116	.213 <sup>*</sup>	.742	116	.179
Auditors proficiency	.098	116	.061	.931	116	.225
Management support	.131	116	.052	.867	116	.124
Information technology	.087	116	.198 <sup>*</sup>	.953	116	.183
Approved audit charter	.092	116	.177 <sup>*</sup>	.836	116	.257

a. Lilliefors Significance Correction \*. This is a lower bound of the true significance

### Collinearity

Variables	Collinearity Statistics	
	Tolerance	VIF
Internal auditors independence	.532	1.127
Internal Auditors Proficiency	.625	1.116
Management support	.431	1.083
Information Technology	.694	1.002
Approved internal audit charter	.723	1.094

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.734	.624	.601	.3502	.524	7.531	5	110	.003	1.523

### Regression result

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	50.027	4.679		3.809	.000		
IAID	.108	.166	.365	5.655	.003	.532	1.127
IAP	.074	.243	.217	4.517	.000	.625	1.116
MS	.120	.150	.478	2.799	.002	.431	1.083
IT	.040	.153	.253	1.260	.036	.694	1.002
AIAC	.145	.182	.579	3.797	.001	.723	1.094

a. Dependent Variable: IAE