



ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE

**DETERMINANTS OF INTERNAL AUDITING EFFECTIVENESS
IN SELECTED A PUBLIC UNIVERSTIES IN ETHIOPIA**

**A THESIS SUBMITTED TO THE DEPARTMENT OF
ACCOUNTING AND FINANCE, IN PARTIAL
FULFILLMENT OF THE OF MASTER OF BUSINESS
ADMINISTRATION (MBA) IN ACCOUNTING AND
FINANCE**

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ADVISOR: MISRAKU MOLLA (Ph.D.)

January, 2023

ADDIS ABABA ETHIOPIA



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CERTIFICATE

This is to certify that the thesis entitles “Determinants of internal auditing effectiveness in Selected a public university in Ethiopia”, submitted to St. Mary’s University for the award of the Degree of Master of in Accounting and Finance and is carried out by Mrs. Kidist Solomon under Dr. Misraku Molla guidance and supervision.

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DECLARATION

I hereby declare that this thesis entitled “Determinants of internal auditing effectiveness in a public university in Ethiopia”, has been carried out by me under the guidance and supervision of Dr. Misraku Molla. I state that this thesis is an original report of my research, has been written by me and has not been submitted for any previous degree or diploma to any university or any institutions.

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ACKNOWLEDGMENT

This would not have been possible without the guidance and the help of almighty God & several individuals who in one way or another contributed and extended their valuable assistance in the preparation and completion of this study.

First and foremost, I offer my sincerest gratitude to my advisor, Misraku Molla (Ph.D.) who has supported me throughout my thesis with his patience and knowledge whilst allowing me the room to work in my own way. My heart-felt thanks also goes to all my family mainly my husband & mother. Not forgetting to my best friends who always been there as well as expressing my apology that I could not mention personally one by one. For their understanding & endless love, through the duration of my studies.

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ABSTRACT

*This study examines the determinants of internal audit effectiveness in public universities in Addis Ababa. The study sample was made of the **internal auditors and finance manager, department manager** from the public universities as sample of 79 was drawn on which 73 was used for the study. The data was collected by using questionnaire. The data analysis involved **frequencies, percentages, and SPSS** analysis in terms of measurement of **mean, standard deviation, correlation, regression** and **analyzed** using **explanatory** research design method. The result of the study shows that, the public university show that, the universities have annual audit plan and the area of audit is important to the universities. The internal auditors are well experienced and adopted the universities audit system. In addition to this the internal auditors of the institutions are qualified on the education and capable to the internal audit. On the opposite, the institutions internal audit practice doesn't finish the task timely and according to the given planned time for their audit. The conclusion shows that, Although, the universities have well experienced, qualified on the education and capable to the internal audit and they take professional development activities on the audit area, the they are not enough to perform their duties and the work and the number of auditors doesn't match. The researcher recommended that, the management should increase the number of certified internal auditors by funding the certification fees and by facilitating the way for certification. And also, the researcher recommended that, the procedures and processes of the public universities needs to be reviewed to check any obstacle. The last recommendation is the internal auditors should maintain good reporting structure by creating the way to reporting to the concerned body.*

Key Words: Internal Audit; Public Universities Internal Audit Effectiveness, Ethiopia

LIST OF ACRONYMS AND ABBREVIATIONS

(AC) Auditor's Competency

(AQ) Audit Quality

(AIAC) Approved Internal Charter

(AICPA) American Institute of Certified Public Accountants

(CIA) Certified Internal Auditors

(IA) Internal Audit

(IAD) Internal Audit Division

(IAE) internal audit function

(IIA) Institute of Internal Auditors

(IPPF) International Professional Practices Framework

(IS) Information Systems

(ISPPIA) International standard professional practice of internal audit

(MoFED) Ministry of Finance and Economic Development

MS (Management Support)

(SPSS) Statistical Package for Social Sciences

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

All countries and governments are responsible for the use of national resources and public funds and for ensuring that these resources are used efficiently, effectively and economically for public service delivery. Organizations have encountered rapid changes in economic complexity, expanded regulatory requirements, and technological advancements in recent years. In addition to these changes, the current corporate scandals and the global financial crisis also pushed the public and regulatory bodies to give unique position to internal audit in corporate governances for internal assurance services (Sohand Bennie, 2011).

In this regard, the internal audit effectiness (IAE) is a key mechanism for monitoring the use of the scarce resources available. This function plays a pivotal role in all organizations, especially in larger and more complex systems that need greater and more prudent use of available resources to increase their competitive advantage (Alkebsi & Aziz 2018; Asiedu & Deffor 2017; Ridley 2008). In the recent past, internal auditors were not viewed as independent but as mere assistants to accountants and external auditors. In contrast, internal auditors are today perceived as independent professionals who play a critical role in promoting the effective and prudent use of organizational resources. However, the independence of internal auditors has frequently been identified as a significant issue, particularly when internal auditors are staff members at the organizations they audit. In the absence of organizational structures and appropriate reporting lines for internal auditors, this issue becomes more problematic in the public sector (Alzeban & Gwilliam 2014; Norman, Rose & Rose 2010).

Because of its remedial and deterrent capabilities, internal auditing has also become integral in improving organizations' operational performance and financial integrity (Dittenhofer 2001). As noted by Tackie, Marfo-Yiadom and Achina (2016), internal audits pose a unique challenge for public sector organizations because they not only focus on internal control and adherence to regulations, but also aim to provide consulting services and suggest improvements for organizational operations. According to the Institute of Internal Auditors (IIA) (2017):

Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes.

Moreover, internal auditing plays a pivotal role in ensuring that organizational assets are used effectively and in line with the organization's objectives and goals (Van der Schyf 2000).

Public sector entities are regarded as part of the public body. According to the Saudi government website, Ministry of Finance (2018), public sector entities are partly or entirely financed by the national budget and are expected to provide basic government services to citizens. If these government entities are partly funded by the national budget, then they have their own sources to cover the expenses. For example, some public institutions receive a small part of the funds from the government because these institutions usually have their own sources of funds from providing services. The public sector includes many different organizations with diverse compositions and functions. The key purpose of these bodies is to achieve the goals of governments (Seol et al, 2011).

Public sector organizations apply internal auditing processes differently to private sector organizations. These differences lie in internal auditors' roles and responsibilities as well as how these functions are fulfilled. This is expected because public sector organizations differ from private ones in size, function and complexity. However, internal audit processes within government entities can be influenced by a country's level of maturity and by cultural considerations. Both these factors can hinder internal audits, making it more difficult for organizations to reach their objectives and goals, including state goals (Dicle & Usluer 2016).

Therefore, this study is driven by this research hiatus to investigate the determinants of internal auditing effectiveness in the context of public universities by examine detail the audit quality, audit competency, management support, independence of internal audit and approved internal audit charter. To achieve its objectives the study used questioner to collect relevant information. Finally, the researcher was used explanatory method to assess the internal auditing effectiveness in the context of public university which are found in Addis Ababa city administration.

1.2. Statement of the Problem

Audit is essentially entrusted with the task of reporting reality in financial statements and this reality is what the users of accounting information expect. However, the auditors may not check out the reality and this reality may fall short of user expectations. This shortfall in audit Independence is broadly label as audit expectation gap (Cohen and Sayag, 2010). Because internal auditors can make line managers aware of their responsibility can act as a consultant in monitoring risk, identifies weakness in internal control system, and facilitates the implementation of risk management as well as IA contributes to the appropriateness of procedures and operations of the audited body (Arena and Azzone, 2009; Dittenhofer, 2001).

In Recent demand all business-oriented organizations for greater accountability from management, board of directors, audit committee, executive management or other levels of management, they will more disagreement to the services of internal audit effectiveness. Ample staffing is essential for a system to its full capability. Weakness in staffing can lead to mismanagement, error and abuse, which can negate the effect of other controls (MoFED, 2004). Despite all of the above, internal auditors in private sector are falling short of expectations in executing their duties independently as they lack full support of the management since they may be forced to work in favor of them (Harrison K. et.al., 2015). Internal auditing system fails in examining whether the organization objective not concealing with the goal or not controlling objective, may result in loss of asset or the organization may involve in risky agreements (Leung and Cooper, 2009).

Some of the challenges identified by the Ministry of Finance and Economic Development (2004), in their internal audit manual are lack of management respect, lack of independence, assigned of internal auditors to many tasks and being ignored (conflict of interest) and lack of professional development. Internal audit recommendations are not giving enough management attention and support which adversely affect the effectiveness of internal audit. In addition, 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, poor leadership for internal audit function, lack of resources, and lack of competent personnel are also some challenges of internal auditors (Seol and Sarkis, 2006, (Smith, 2005).

There are also other researchers who conducted researches on assessment of internal audit effectiveness on the public sectors. In which, (Cohen & Sayag, 2010 on internal audit deaminates in public companies; Arena and Azzone, 2009) on internal audit effectiveness and challenges. And also, in Ethiopia Mihret and Yismaw, 2007 and Haile Mariam, 2014 on assessment of internal audit effectiveness on different sectors. Most of the prior research works and an emphasis from different sector. Besides, most of the empirical evidences made available on internal audit effectiveness were outside Ethiopia. In other words, the studies conducted out of contexts where the cultural, geographical, and economic conditions are different from Ethiopia. At all, this study is different from the previous studies by study time, the methodology and the determinants factor are different from the earlier. Until now, as per the knowledge of the researcher, there has not yet been detail research works made available to the audit practice on the audit effectiveness with its implication on Ethiopian public universities context. Therefore, the researcher motivated to fill those aforementioned gaps (i.e., Methodological gap, focused area gap and contextual gap) and was tried to conduct research on the internal audit effectiveness on the public sectors.

The research is intended to fill the gap identified in some researchers done by some few scholars so far literatures. This study was focused on to identify determinants of internal audit effectiveness in public universities in Addis Ababa. The researcher is attempted to identify the factors influencing internal auditor's effectiveness in the case public universities under Addis Ababa. Specifically, how audit quality, Auditor's competency, management support, organizational independence, and presence of approved internal audit charter influence the effectiveness of internal audit have been examined and answered.

1.4. Objectives of the Study

1.4.1. General objective

The general objective of this study is to identify determinants of internal audit effectiveness in public universities operated in Addis Ababa city Administration, Ethiopia.

1.4.2 Specific objectives

The study addressed the following specific objectives which are drawn from the general objective

1. To investigate the effect of audit quality on internal audit effectiveness.
2. To examine the effect of auditor's competency on internal audit effectiveness.
3. To examine the influence of management bodies support to internal auditors IAE.
4. To determine the effect of auditor's independence on IAE.
5. To investigate the effect of the existence of approved Internal audit charter on internal audit effectiveness.

1.5. Research Hypothesis

The study empirically testes the following five hypotheses

H1: Audit quality has positively and significantly related to the internal audit effectiveness.

H2: Auditors Competency has positively and significantly related to the internal audit effectiveness.

H3: The management support has positively and significantly to the internal audit effectiveness.

H4: Independence of Internal Audit has positively and significantly related to the internal audit effectiveness.

H5: Approved Internal Audit charter has positively and significantly related to the internal audit effectiveness.

1.6. Scope of the Study

The scope of the study is limited to investigate the determinants of internal audit effectiveness in public universities in Addis Ababa. In addition, the researcher intent of this study is to investigate the pre-selected determinants of the IA effectiveness such as Audit quality, Audit competency, management support Independence of Internal Audit & Approved IA charter in public university. Geographically; the research was delimited on public universities which are found in Addis Ababa (Sidist Killo Campus, CBE campus, Amst Killo Campus, Arat Killo Campus, Yared Art school, Tikur Anbessa Campus, School of Commerce, Lideta Campus, Akaki Campus and yekatit 12 campus). The scope of methodology was used both primary and secondary data which are prior literature and questioner from internal audit and finance department of the selected public

university. The target respondent was limited to internal auditor staffs and finance department because they can give true and well considered responses to the researcher so as a result the final finding was good.

1.7. Significance of the Study

The study aim is to examining the determinants of internal audit effectiveness in public universities in Addis Ababa. The finding of the study will be great importance to managements of the selected public universities which are found in Addis Ababa to understand the determinants of effectiveness of Internal audit. It will enlighten other governmental universities and other governmental public institutions in Ethiopia. The study will also be important for policy makers and regulatory bodies in assessing the legal frameworks affect implementation, and effectiveness of internal audit. And also, the study finding identify areas of weakness with constructive recommendation.

As starting reference for other researchers who are interested on the same topic. The primary advantage of this study is to establish a knowledge base that enables to makes a sound decision and take corrective action on internal auditing performance. And also, it will be contribution by laying the ground for future researches to be conducted on these recent phenomena.

1.8. Limitation of the Study

The limitations of the study are in terms of coverage and depth owing of time and financial resource availability to gather data from all the targets of the study located in different portfolios of the country that could help to get well organized responses for the subject under study. The cost and time required to conduct the study is so expensive because of that, the study was limited to assess the determinants of internal audit effectiveness in public universities in Addis Ababa. Due to the pandemic corona virus disease the study was conducted only used questioner. And it may be difficult to get respondent and to conduct interview of managements due to the fear of the Pandemic Corona virus. To minimize the impacts of these limitations the researcher was designed good quality questionnaires to enable respondents provide relevant data.

1.9. Organization of the Study

This research was presented in five chapters. The first chapter which is the introduction covers the background of the study, statement of the problem, objectives of the study, research hypothesis,

significant of the study and the scope of the study. This was followed by the second chapter which is reviewed related theoretical and empirical literature of the research. The third chapter of the study was taken in to account the methodology of the research which comprises the research design, the research population, sample and sampling technique and also it was considered the sources of data and data collection technique, methods of data collection and analysis. Chapter four was presented major results and discussions which deal the descriptive analysis. And in chapter five the conclusion and recommendation were made by addressing in the study.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1. Definition of Auditing

An audit of historical financial statement has been defined as: “a systematic process of obtaining and evaluating objective evidences regarding assertions about economic actions and events to find out the degree of correspondence between those assertions and established criteria, and communicating with interested parties with regard to the end results” Baltaci & Yilmaz (2006). Lawrence (1988), defined audit as it is a form of evidence service in which the auditor issues a written report expressing his/her opinion about whether the financial statements are materially conformation with generally accepted accounting principles or other recognized criteria.

According to Arens, et al., (2012) Auditing can be classified based on the primary audit beneficiaries into two: and these are categorized as External Auditing and Internal Auditing. External auditors are those who are not working for the audited company, and they have been able to provide a report prepared on financial statements through checking whether that particular report is revealing the facts and fair view of the financial performance of the company or not. Such an auditor is called “independent” or “external” auditor. An external auditor may practice as a sole proprietor or as a member of an audit firm. External auditors are auditors who are doing audits of financial statements for publicly traded organizations; government, private companies, joint ventures, and other types of entities. It performed once, at the end of every fiscal year unless there are undefined circumstances that are occurring during that budget year.

Internal auditing can be expressed as independent and objective evaluation of the performances and finances of companies that are mostly operated by their own employees. Every piece of work will be done by a separate set of staff, which may or may not have professional expertise and qualifications in auditing. The main duty of an internal auditor is examining and giving useful opinion for managers to take corrections and advising for better management and financial activities in the specific organization. When an internal auditor found out in his/her auditing as there are financial irregularities, inaccuracies or other financial flawed that are caused by or if it is believed that due to the inefficiency of the management, he/she has to report the fact. Internal auditors by providing their independent opinions and conclusions regarding the operation,

function, system and wellbeing of the organization they can be helpful so as to prevent the bankruptcy/insolvency of that audited company. IA can facilitate information in order to give assurance for the healthiness of the company also they can give advice as well as consulting services.

In modern days the need for an internal auditor is utmost. Using internal auditors help to improve the existing procedures that are applicable and policies which are in practice in order to reduce costs and better services to users (Staciokas & Rupsys, 2005).

To create a strong corporate organization, IA plays a critical role in managing and operation of the organization (Changwony & Rotich, 2015). Also, prior to the external auditing is in process auditing that is supposed to be done by IA at the time of annual audit it helps not to consume the amount of time which may probably supposed to be spent by external auditors. Moreover, if there are cancellation of costs and other expenses that are in financial reports, and that is not considered in line with governmental laws having an internal auditor in the organization brings effectiveness to the company and lessens its financial irregularities. Besides, external auditors are likely to rely more on the internal auditor's report (Goodwin & Kent, 2006).

2.2 Roles of Internal Audit

The new definition of internal audit given by the Institute of Internal Auditors (IIA) is “Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization’s operations. It promotes organizations to achieve their objectives by bringing a systematic and well-organized approach to assess and improve their effectiveness in control, risk management, and governance processes” (IIA, 2001).

Other researchers also share the concept that is put by IIA. Karapetrovic & Willborn, (2000), puts it as the definition of IA is taking into account organizational trends and it concentrates on a consultative approach within which an organization operates dealing with efficiency and effectiveness rather than accuracy of recording. “Internal auditing can be defined as value addition to the organizations instead of being a mere administrative function or legal compliance that keeps organizations going.” (Flesher & Zanzig, 2000).

In the ever-changing business environment, internal auditing has a role by adding value to any viable organization. In addition to normal functioning of the internal checking system in the

presence of internal auditing is highly essential in order to have accuracy, completeness, reliability and timeliness of accounting information. And these are can be tested and reported for helpful and corrective action.

Nagy & Cenker (2002) relates internal auditing with risk management, controlling processes, and the overall organizational operations. This is important as it embraces the expanding role of IA, which in recent years has evolved from an arrow focus on control to include risk management and corporate governance. Internal audit is the independent evaluation of activity within an organization that practices and defensive mechanism for the review of accounting, financial and other business practices as an arm of management. It is a type of control which functions by measuring and evaluating the effectiveness of other types of control (Tandon, Sudharsanam, & Sundharabahu, 2010). And also, according to Baltaci & Yilmaz (2006), the effort to reform a fiscal system should include internal control and audit and this is due to the crucial role they are playing in enhancing accountability and effectiveness.

The activity of IA would help an organization by evaluating the coming or unforeseen risks, whether they are or under controlled. Therefore, the work of IA is worthwhile. Risk management is an important task that should be considered by any public sector private entity. Risk management brings effectiveness and efficiency in using available resources. The internal auditors' role in risk management involves in assessing and monitoring the risk that organization supposed to face. Their recommendation will be handy in order to come up with mitigating those risks and evaluating the trade-offs. It will also help the organization accomplish its strategic and operational objectives. Managing risk well requires careful consideration of the key concepts of minimizing loss, maximizing opportunities and preparing for the uncertainties (Sarens & De Beelde, 2006).

The internal auditing activity has become an essential part in accounting for applying mechanisms and tools so that to do public financial controls, monitoring and evaluating managerial activities. According to Gupta, (2001) these are essential factors in the achievement of objectives. It has the key role of reporting audited outcomes to the top management staff who are at senior managerial level in the public sector entities, especially regarding the control systems that are applied within the management and it also recommends about if there are needs for improvements where are supposed to be in practice.

2.3. Review of underlining Theories

Theory of internal audit defined by Gill & Johnson, (2002) as it is a formulation concerns the cause-and-effect relationships between two or more variables, which may or may not have been tested. A new approach which is adopted by Endaya & Hanefah, (2013) puts it as a combination of three theories: which is **agency**, **institutional**, and **communication** theory.

According to Adams (1994), Agency relationship can be explained as a contractual agreement which will be signed and become binding to accomplish any given piece of work between the organization owner(s) and its top management. Managers are in charge of managing and directing the overall activities of the organization on the behalf of its owners. However, their authority and power can be restricted up on the will of the owners unless they are fully authorized or commissioned.

2.3.1. Agency Theory

Agency relationship could be defined as a contract among the organization owner(s) and its top management. Managers work with the organization as agents to perform some service on behalf of owners who delegate some decision-making authorities to managers. These authorities could be misused by managers to meet their own personal interests. Therefore, the existence of the audit committees, and the external and internal auditors will help the organization in enhancing their performance, and also will ensure that the management carries out its plans according to procedures (Adams, 1994). Peurseem and Pumphrey (2005) considered internal auditors as agents and monitors for a variety of the internal audit users that include the board, audit committee and senior management. Agency problems could occur when the board or its audit committee is inefficient, and hence, the senior management is likely to be a powerful influence over the internal audit. This complex web creates an inherent dilemma for the internal audit: how can it carry out their monitoring role over management if it is ineffective itself?

Internal auditors often are employed by senior management, but at the same time, they are also agents of the board and audit committee who trust in the internal auditors' ability to evaluate senior management's works.

However, internal auditors may have varying motives to act against the board of directors' interests and its audit committee and these motives include financial rewards from managers, personal

relationships with them, and the power of senior management in shaping the future position of internal auditors and their salaries. In such a work environment, internal auditors as agents may have an incentive to be biased of information flows, which leads to new concerns of the board and audit committee about their trust on the internal auditors' objectivity, and preventing such threats of objectivity becomes necessary for the board and its audit committee.

Internal auditors as agents must perform audit processes at the professional level requiring education and professional certifications, experience, and other competencies needed to perform their responsibilities perfectly.

Having internal auditors with such requirements and the existence of training programs for internal auditors, would increase the confidence level of the board and audit committee in the internal auditor competence. At the same time, internal auditors, by proving their duties in accordance with the professional level, can refute charges of neglecting their duties.

The internal audit department works are achieved under supervision of the chief audit executive who is the main responsible individual for putting the internal audit plan, reporting internal audit findings and following-up internal audit recommendations. The organization members are required to evaluate the internal control system

(SOX, Section 404, 2002), and in order to achieve this requirement they depend on the internal audit department.

During this evaluation, internal auditors should collect sufficient and reliable evidences that will support their assessment of the internal control system. The existence of such evidences will increase the confidence level of organization members on the works performed by the internal audit. Hence, internal audit department performance is a crucial requirement for organization members to consider internal auditors as agents.

Internal auditors, as agents of the organization members, need their support. The existence of an effective audit committee in the organization enhances internal audit independence and also, reduces senior management interferences either in internal audit scope or its performance. Internal auditing is used to minimize risks that are associated with finance and unforeseeable problems so as to save the organization as well as the stakeholders of the company by controlling the dishonest activities and corrupt deeds of the top management. Internal auditors are the agents of the audit committee and the board of directors" in order to evaluate the performance of officers who are at the top management. The effort of internal auditors with such a quality would contribute a great.

2.3.1. Institutional Theory

Institutional theory gives details how organizational structures and practices are shaped through changes induced by normative pressures, including by the influence of external and internal sources such as the laws of the land, regulations and the like, or guidelines that are produced by the professionals who are good at this particular discipline (Zucker, 1987; Mihret et al., 2010). Institutional theory also explains about institutional pressure effects up on organizational structures and practices (Abbu-Azza, 2012). According to DiMaggio & Powell, (1983) there are three institutional pressures known as coercive, normative, and mimetic. Similarly, Arena & Azzone, (2007) have identified the institutional pressures that have an impact on individuals in part and the organization as a whole and these are clarified as laws and regulations (coercive isomorphism); choices of other organizations (mimetic isomorphism); and consultation or professional bodies (normative isomorphism).

Isomorphic processes can increase the efficiency of IA activities of an organization because being similar to other organizations can be taken as a parameter to check whether they are up to the standard in comparison with those who are rewarded due to their efficient product output and managerial capability to run the organization (DiMaggio & Powell, 1983). This similarity can make easier to transact with other organizations to attract carrier-minded staff, to be acknowledged as legitimate and reputable, and to fit into an administrative eligibility (Abbu-Azza, 2012).

“Coercive isomorphism is a pressure which applied to establish Internal Audit Department” (Al-Twajry, et al., 2003). “Institutional theorists consider organizations as members of an organized field, which comprises several organizations or industries that are interrelated in the same way. This interrelation leads organizations to influence others” (Mihret, et al., 2010). Arena & Azzone (2006), in their paper they indicate that „institutional theory provides a means of understanding the conforming and legitimating processes which affect the development of IA“.

Normative isomorphism is a pressure which is developed from increased proficiency within the organizations. It has a positive relationship with institutional changes due to the recognition of professionals within the organization (Abbu-Azza, 2012). There are two aspects of professionalization that are important for the sources of isomorphism (DiMaggio & Powell, 1983). The first one is the formal education which is provided by higher education professionals. In this

regard, internal auditors must undertake courses about internal auditing in higher educational institutes. The other one is also attending training programs that are produced by professional institutions. Accordingly, there is a need for internal auditors to get qualification like those who are Certified Internal Auditors (CIA) or they have to be chartered auditors even within their own organization. Therefore, higher education and professional training institutions are important for the development of organizational departments like internal auditing.

Several studies show that internal audit have adopted an institutional theory (Abbu-Azza, 2012; Al-Twajjry et al. 2003; Arena & Azzone, 2007; Changwony & Rotich, 2015; Mihret et al. 2010).

“Institutional theory is relevant to this study, according to the following reasons. Firstly, institutional theory includes IA practices which are part of organizational structures and it helps to discuss such organizational phenomena without a limited set of organizational goals” (Abbu-Azza, 2012). And secondly, Institutional theory supports countries which has an undeveloped equity market like Ethiopia” (Mihret et al. 2010). Therefore, this study draws attention at isomorphic processes of normative and coercive as it had been suggested by institutional theory so as to investigate the factors determining IA effectiveness.

2.3.3. Communication Theory

Both institution internal audit standards and previous studies reveal that, the study of effective communication in internal auditing is necessary, and hence this study should consider the communication theory for its achievement. Earlier studies have confirmed that in any organization IAD effective communication skill is so vital (Hahn, 2008). Inability to communicate effectively can lead to disseminated inappropriate information or makes communication more to be complex (Endaya & Hanefah, 2013). The effective communication of internal auditors can be explained through the existing effective communication between internal auditors and auditees, internal auditors and members of the organization, and within themselves, too (Endaya & Hanefah, 2013).

To avoid communication problems, Hahn (2008) recommends that parties of the communication process should focus on and offer only the required information through easy ways so as to provide the actual meaning to the information rather than just pass on the message, and keep the information clear and simple to make it understandable and finally ask for feedback. In this study,

effective communication is one of the main factors for the effectiveness, which can be measured by examining the relationship with auditees.

2.4. Types of Audits Performed by Internal Auditors

A variety of audits are performed in the review of organizational programs and Resources. (Aren, 1999; Dandago, 2002 and Sabari, 2003) These audits include:

2.4.1. Financial Audits:

These audits review accounting and financial transactions to determine 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.

2.4.2. 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 internal control environment of automated information processing systems and how people use these systems. The audits usually evaluate system input, output; processing controls; backup and recovery plans; system security; and computer facilities.

2.4.3. 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 internal control environment of automated information processing systems and how people use these systems. The audits usually evaluate system input, output; processing controls; backup and recovery plans; system security; and computer facilities.

2.4.4. Operations Audits:

These audits examine the use of resources to determine if resources are being used in the most effective and efficient manner to fulfill the organization's mission and objectives.

2.5. Responsibilities of Internal Audit

- Evaluating control and evaluating managers at our levels.
- The internal auditor work includes assessing the tone and risk management culture of the organization as well as evaluating and reporting on the effectiveness and efficiency of the implementation of management policies.
- Evaluating risks
- Internal auditors identify key activities and relevant risk factors and assess their significance.
- Analyzing operations and confirming information.
- Internal auditor work closely with line managers to review operations than report their findings. The internal auditor must be new versed in the strategic objectives of the organization. So that they have a clear understanding of how the operations of any given part of the organization fit into the bigger picture.
- Reviewing compliance
- Compliance review ensures that the organizations is adhering to rules, regulations, laws, codes of practices, guidance and principles as they apply indirectly and ○ correctively to all parts of their organizations.

2.6. Internal Audit Effectiveness

The word “effectiveness” has 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. While Mizrahi and Ness Weisman

(2007) give their own definition which is in line with the ability of the internal auditor intervention in prevention and correction of deficiencies and they finally defined internal audit effectiveness as “the number and scope of deficiencies corrected following the auditing process.”

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 ability of achieving established objective. Based on the above definition, this study defined internal audit effectiveness as the ability of the audit work to achieved established objective within the organization.

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.

Arena and Azzone (2010), Chaveerug (2011) and Mihret et al (2010) emphasize the need for future studies to examining the factors that influence internal audit effectiveness and the possible interactions among them. Also, there are needs for a more comprehensive study on the issue of internal audit effectiveness both conceptual and empirical (Cohen & Sayag, 2010), similarly, considering the little literature about the measurement of auditing effectiveness particularly in the public sector, more need to be done (Mizrahi & Ness-Weisman, 2007).

Different research has different direction to study about the effectiveness of internal audit. Dessalegn (2007) did a case study in Ethiopian to give a frame work of four important factors which are the “audit quality, management support, organizational setting, and auditee attributes” to evaluate the effectiveness of internal audit. Meanwhile, Moorthy (2011) mainly focused on information technology which can affect the audit process, and give examples about IT system adopted by auditing process. Mu’azu (2014) did a study on the audit committee to give empirical

evidence about the influence of audit committee on internal audit. Moreover, Zulkifli (2014) directly stated some factors such as independence/objectivity of internal auditors which is different from Dessalegn (2007) that evaluate the effectiveness of internal audit.

The main aim of this research to examined to determine internal audit effectiveness and after reviewing literatures the following factors will be taken as an independent variable for internal audit effectiveness. These are Audit Quality, Auditors competency, Top Management Support, Independence of internal audit and the presence of approved internal audit charter and the existing literatures are reviewed as follow.

2.7. Determinants of Internal Audit Effectives

2.7.1 Audit Quality

According to Public Company Accounting Oversight Board (PCAOB, 2013), the definition of audit quality is as meeting investors' needs for independent and reliable audits and robust audit committee communications on: 1. financial statements, including related disclosures; 2. assurance about internal control; and 3. going concern warnings. In proposing a definition of audit quality, we seek to base it on concepts that are already widely accepted, rather than trying to break new conceptual ground. (PCAOB, 2013) The purpose of a quality audit is to assess or examine a product, the process used to produce a particular product or line of products or the system supporting the product to be produced. A quality audit is also used to determine whether or not the subject of the audit is operating in compliance with governing source documentation such as corporate directives, federal and state environmental protection laws and regulations, etc. A quality audit distinguishes itself from a financial audit in that the primary objective of the financial audit is to verify the integrity and accuracy of the accounting methods used within the organization. Internal Auditors identified the factors of quality of audit functions by: Proficiency, independence, objectivity (Wubishet & Dereje, 2014).

2.7.2 Auditor's Competency

Auditor's Competency is essential for a system to its full capability. Weakness in staffing can lead to mismanagement, error and abuse, which can negate the effect of other controls (MoFED,

2004). The size of IA staff and the auditor's competency of internal audit are the critical characteristics of IA quality that can't be separated. This means at the absence of one dimension the other cannot contribute to the quality of internal auditors.

The empirical findings by Al-Twajjry et al. (2004), based on questionnaire and interview responses from internal and external auditors, working in Saudi Arabia, suggests that the external auditors believes that IAE size is an important indicator of its quality. In addition, large size of IA staff has many benefits for internal operations of IA unit. For instant, larger sized functional units, there will be more opportunity and flexibility to have a staff rotation schedule that can also influence IA effectiveness by promoting a healthier relationship and resulting in more objective audit investigations. Furthermore, Zain et al. (2006) argue that a larger size internal audit is likely to be better resourced, including having a broader work scope, higher organizational status and wider staff talent than a smaller unit. Likewise, the quality of IA work is likely to be higher in internal audit units with a larger proportion of staff with audit experience than those with a lower proportion of audit experience.

Competent staffing of an internal audit department and good management of that staff are keys to the effective operation of an internal audit. An audit requires a professional staff that collectively has the necessary education, training, experience and professional qualifications to conduct the full range of audits required by its mandate (Al-Twajjry et al, 2004). Auditors must comply with minimum continuing education requirements and professional standards published by their relevant professional organizations (IIA, 2001).

The IIA's standard 1210, on proficiency of the auditor require that the internal auditors should possess the knowledge, skill and other competencies need to perform their responsibilities (IIA, 2001). Additionally, the critical dimensions of IAE are the quality of its internal auditing staff measured in terms of internal auditors' skill (Seol et al, 2011; Leung and Cooper, 2009; Seol and Sarkis, 2006). As part of this, Competency Framework for Internal Auditing (CFIA) focuses on the skills needed by an individual person to be an efficient internal auditor.

The literature review specifically conducted on the communication skills (Smith, 2005) stated that the development of effective communication skills (such as listening, interpersonal, written

and oral communication skills) is an important part of internal auditor's advancement potential. Internal auditors must possess highly developed communication level skills to become a successful professional. The development of these skills is not only enhancing the auditor's potential, but will also improve the quality of audits produced.

In addition to the above dimension of IA quality, the competence of internal auditors can be measured in terms of academic level, experience and the efforts of staff for continuous professional development and compliance with audit standards. Both the quantity of audit effort and the quality of professional care exercised will determine the overall quality of the internal audit work (Cohen & Sayag, 2010; Leung and Cooper, 2009; Belay 2007). Arena and Azzone, (2009) also stated that IA effectiveness increase in particular when the ratio between the number of skilled internal auditors and employees grows. This shows that sufficiently large number of skilled professionals enables the IA to do its duties.

2.7.3 Top Management Support

Internal auditors have a close relationship with management in their day today activities. They need good support and perception from their management to be more effective and to achieve the audit objectives. Management support is expressed in terms of supporting the auditing process by fulfilling the necessary resources, finance, transport if required, providing training, introducing auditors with new technology and procedures, budgeting funds for certification and other facilities that facilitate the internal auditing works.

Management support has a far-reaching consequence on IA effectiveness in organizations. For example, Mihret and Yismaw (2007) in their case study of IA effectiveness on public sector shows that the component of management support consists of the response to audit finding and the commitment to strength internal audit which has significance influence on IA effectiveness. Given the fact that internal audit activities are performed in dynamic management process and more supportive environment, internal auditor expects senior management to take the first steps to support the IA process. Because, Sarens and Beelde (2006) argue that the overall acceptance and appreciation of IA within the company is strongly dependent upon the support they receive from senior management. Internal audit actively seeks management support with resources, commitment to promote and communicate their added value.

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). This means it is the interest of management to maintain a strong internal audit department (Adams, 1994; Mihret and Yismaw, 2007).

In addition, implementation of audit recommendations is highly relevant to IA effectiveness (Sarens and Beelde, 2006; van Gansberghe, 2005) which is the component of management support (Mihret and Yismaw, 2007). The management of an organization is viewed as the customer receiving IA services. As a result, management's commitment to use audit recommendations and its support in strengthening internal audit is vital to IA effectiveness.

Therefore, audit finding and recommendations would not serve much purpose unless management is committed to implement them. Furthermore, Belay, (2007) find that to curb corruption and inefficiency in the public sector of Ethiopia, it is mandatory to have effective internal audit that in turn needs appropriate governance structure, mobilizing sufficient and appropriate resource and competent personnel.

2.7.4 Independence of Internal Audit

Independence has no single meaning and interpretation across the people; hence the concept is subject to ambiguity and uncertainty (Wines, 2012). However, for the purpose of the case study independence refers to the concept of being free from any management influence while internal auditors perform audit activities and issue audit report (Ahmad & Taylor, 2009; Belay, 2007; MoFED, 2004). Independence is fundamental to the reliability of auditor's reports. Those reports would not be credible, and investors and creditors would have little confidence in them, if auditors were not independent both in fact and appearance. The assurance services provided by auditors derive their value and credibility from the fundamental assumptions of independence of mind and independence in appearance (Wines, 2012; Stewart and Subramanian, 2010).

While the internal audit typically the whole management process, to maintain objectivity, to increase the reliability of information, to be free from unacceptable risk of material bias, and to

issue reasonable and credible audit opinion, it is required to be independent (IIA,2001). However, due to an often strong direct or indirect relationship between IA and the Chief Executive Officer (CEO) and/or chief Finance Officer (CFO), it is reasonable to expect that senior management is in a position to exert a significance influence over IA (Sarens and Beelde, 2006; Van Peurseem, 2005).

Independence in fact exists when auditors are actually able to act with objectivity, integrity, impartiality and free from any conflict of interest. While the concept of independence in appearance is the auditor should be perceived by others (the public or other third party) to be independent. In this case, conflict of interest will also exist when a reasonable person, with full knowledge of all relevant facts and circumstances, would conclude that the auditor, or a professional member of the audit team, is not capable of exercising objective and impartial judgment in relation to the conduct of the audit of the audited body.

Auditors should be sufficiently independent from those they are required to audit in order to conduct their work without interference. Coupled with objectivity, organizational independence contributes to the accuracy of the auditor's work and gives employers confidence that they can rely on the results and the reports (Cohen & Sayag, 2010). However, Hellman N. (2011) suggested that CFOs seek to influence audit planning, particularly with regard to internal controls and the selection and scope of entities subject to audit; and this in return impairs the independence of internal auditors.

In order to maintain their independence internal auditor's organizational status and position is also critical which is related to management perception. This is because it enables them to exercise their tasks independently and act objectively. As Stewart and Subramaniam (2010) review under organizational status the IAE should be given the appropriate status in the organization to enable the function to exercise organizational independence and individual internal auditors to act objectively since internal auditors found in a unique position as employees of an organization with responsibility to asses and monitor decisions made by management and also to the management.

Furthermore, many auditors have been argued that in order to achieve audit objectives and become effective organizational independence is very important. For instance, the independence of

internal audit department and the level of authority to which the internal audit staff report are the important criteria influencing the objectivity of its work, and added that organizational independence is more crucial to the effectiveness of the internal auditors, as it protects the auditor from pressure or intimidation, and increases the objectivity of the auditing work (Cohen & Sayag, 2010; Van Peurse, 2005; Boad-Read, 2000).

2.7.5 The Approved Internal Audit Charter

Internal audit charter 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). Additionally, an internal audit charter typically includes the responsibilities of the IA in broad terms, the standards followed by the IA; and the relationship between the IA and the audit committee.

It may also define access to the information (documents, records, systems, and personnel) necessary to perform and reach conclusions on the work, and it is a vehicle for asserting that there are no unreasonable 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 assurance it required on internal control from an IA. Van Peurse (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 internal auditor (Van Peurse, 2005) which in turn affects IA effectiveness.

2.8. Review of Empirical Studies

The main aim of this paper is to assess the effectiveness of internal audit in public universities of Addis Ababa. Different authors and researcher's idea and recommendations regarding the related topic of internal audit are analyzed and presented. For the simplicity of presenting the literature those studies regarding the main determinants or that influence the internal audit effectiveness on the public universities.

Research was made by Sarens and Beelde (2006) argue that the overall acceptance and appreciation of IA within the company is strongly dependent upon the support they receive from senior management. Internal audit actively seeks management support with resources, commitment to promote and communicate their added value.

The study was made by Shewamene H/Mariam (2014) show the direct relation effects of management perception, management support, organizational independence of internal auditors, adequate and competent internal auditor's staff and the presence of approved internal audit charter with the internal audit effectiveness on the public sector management.

Another study by, (Cohen & Sayag, 2010) shows that the management support is very crucial to the operations and internal auditing; because all other determinants of IA practice 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 is the results of decisions made by top management. This means it is the interest of management to maintain a strong internal audit department (Adams, 1994; Mihret and Yismaw, 2007).

In addition, implementation of audit recommendations is highly relevant to IA effectiveness (Sarens and Beelde, 2006; van Gansberghe, 2005) which is the component of management support (Mihret and Yismaw, 2007). The management of an organization is viewed as the customer receiving IA services. As a result, management's commitment to use audit recommendations and its support in strengthening internal audit is vital to IA effectiveness. Therefore, audit finding and recommendations would not serve much purposely unless

management is committed to implement them. Furthermore, Belay, (2007) find that to curb corruption and inefficiency in the public sector of Ethiopia, it is mandatory to have effective internal audit that in turn needs appropriate governance structure, mobilizing sufficient and appropriate resource and competent personnel.

Research was made by, (Wines, 2012; Stewart and Subramanian, 2010) argues Independence is fundamental to the reliability of auditor's reports. Those reports would not be credible, and investors and creditors would have little confidence in them, if auditors were not independent both in fact and appearance. The assurance services provided by auditors derive their value and credibility from the fundamental assumptions of independence of mind and independence in appearance. While the internal audit typically the whole management process, to maintain objectivity, to increase the reliability of information, to be free from unacceptable risk of material bias, and to issue reasonable and credible audit opinion, it is required to be independent (IIA,2001). However, due to an often strong direct or indirect relationship between IA and the Chief Executive Officer (CEO) and/or Chief Finance Officer (CFO), it is reasonable to expect that senior management is in a position to exert a significance influence over IA (Sarens and Beelde, 2006; Van Peurse, 2005).

Auditors should be sufficiently independent from those they are required to audit in order to conduct their work without interference. Coupled with objectivity, organizational independence contributes to the accuracy of the auditor's work and gives employers confidence that they can rely on the results and the reports (Cohen & Sayag, 2010).

However, Hellman N. (2011) suggested that CFOs seek to influence audit planning, particularly with regard to internal controls and the selection and scope of entities subject to audit; and this in return impairs the independence of internal auditors.

As Stewart and Subramanian (2010) review under organizational status the IAE should be given the appropriate status in the organization to enable the function to exercise organizational independence and individual internal auditors to act objectively since internal auditors found in a unique position as employees of an organization with responsibility to assess and monitor decisions made by management and also to the management.

Furthermore, many auditors have been argued that in order to achieve audit objectives and become effective organizational independence is very important. For instance, the independence of internal audit department and the level of authority to which the internal audit staff report are the important criteria influencing the objectivity of its work, and added that organizational independence is more crucial to the effectiveness of the internal auditors, as it protects the auditor from pressure or intimidation, and increases the objectivity of the auditing work (Cohen & Sayag, 2010; Van Peurse, 2005; Boa-Read, 2000). Adequate staffing is essential for a system to its full capability. Weakness in staffing can lead to mismanagement, error and abuse, which can negate the effect of other controls (MoFED, 2004). The size of IA staff and the competency of internal audit are the critical characteristics of IA quality that can't be separated. This means at the absence of one dimension the other cannot contribute to the quality of internal auditors.

The empirical findings by Al-Twajry et al. (2004), based on questionnaire and interview responses from internal and external auditors, working in Saudi Arabia, suggests that the external auditors believe that IAE size is an important indicator of its quality. In addition, large size of IA staff has many benefits for internal operations of IA unit. For instant, larger sized functional units, there will be more opportunity and flexibility to have a staff rotation schedule that can also influence IA effectiveness by promoting a healthier relationship and resulting in more objective audit investigations.

Furthermore, Zain et al. (2006) argue that a larger size internal audit is likely to be better resourced, including having a broader work scope, higher organizational status and wider staff talent than a smaller unit. Likewise, the quality of IA work is likely to be higher in internal audit units with a larger proportion of staff with audit experience than those with a lower proportion of audit experience.

Appropriate staffing of an internal audit department and good management of that staff are keys to the effective operation of an internal audit. An audit requires a professional staff that collectively has the necessary education, training, experience and professional qualifications to conduct the full range of audits required by its mandate (Al-Twajry et al, 2004). Auditors must comply with minimum continuing education requirements and professional standards published by their relevant professional organizations (IIA, 2001).

The IIA's standard 2001, on proficiency of the auditor require that the internal auditors should possess the knowledge, skill and other competencies need to perform their responsibilities (IIA,2001). Additionally, the critical dimensions of IAE is the quality of its internal auditing staff measured in terms of internal auditors skill (Seol et al, 2011; Leung and Cooper, 2009; Seol and Sarkis, 2006). As part of this, Competency Framework for Internal Auditing (CFIA) focuses on the skills needed by an individual person to be an efficient internal auditor.

The literature review specifically conducted on the communication skills (Smith, 2005) stated that the development of effective communication skills (such as listening, interpersonal, written and oral communication skills) is an important part of internal auditor's advancement potential. Internal auditors must possess highly developed communication level skills to become a successful professional. The development of these skills is not only enhancing the auditor's potential, but will also improve the quality of audits produced.

In addition to the above dimension of IA quality, the competence of internal auditors can be measured in terms of academic level, experience and the efforts of staff for continuous professional development and compliance with audit standards. Both the quantity of audit effort and the quality of professional care exercised will determine the overall quality of the internal audit work (Cohen & Sayag, 2010; Leung and Cooper, 2009; Belay 2007). Arena and Azzone, (2009) also stated that IA effectiveness increase in particular when the ratio between the number of skilled internal auditors and employees grows. This shows that sufficiently large number of skilled professionals enables the IA to do its duties.

2.9. Literature Gap

Along with the findings of different research papers on the internal audit effectiveness, many has been done on the determinants of internal audit effectiveness of public sector and little has been done on private companies in different country. But specifically, no research paper has done on determinants of internal audit effectiveness on public universities in Ethiopia.

This literature review chapter is argued five potential factors related with the effectiveness of IA. These are Auditor quality, Auditor's competency, Top management support, Independence of Internal audit, Approved Internal audit charter. Effective internal audit has the ability of identifying

non-compliance activities and the added contribution to the business. According to the literature review, the researcher suggests the following gaps in the literature:

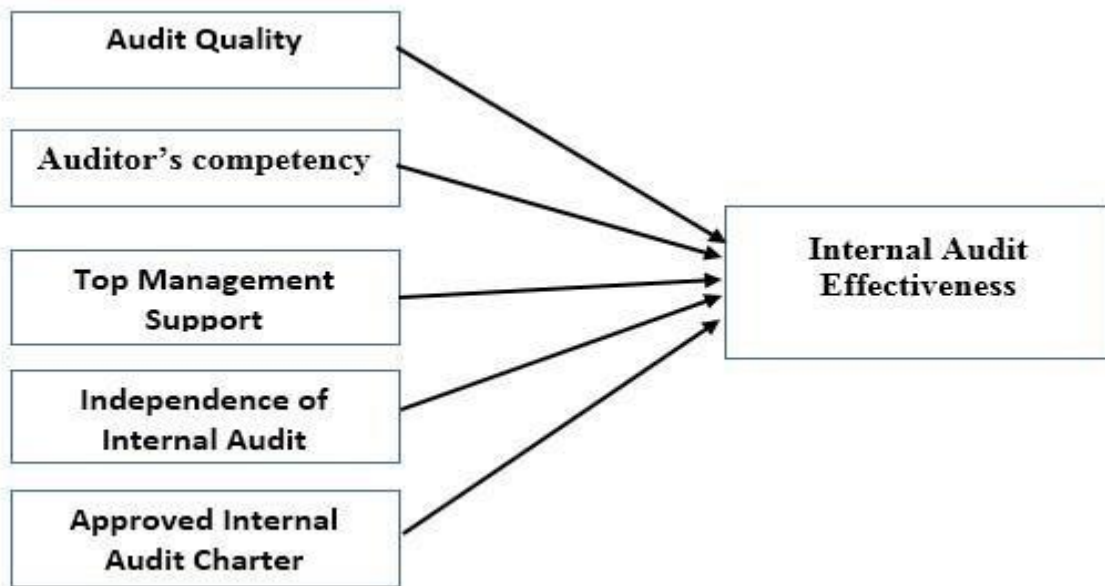
1. There is a limitation on research conducted concerning the IA effectiveness. Some researchers support additional research and the need for a broader study on the issue of IA effectiveness.
2. Their study done before five years; limited studies have been conducted in effectiveness of IA in Ethiopia.
3. They also focused our country's research on manufacturing companies, governmental offices, and other business area. Studying the public universities is important, because, they have a wide role on the economy of the country. It is exposed to different threat since its operation is mostly related to the most sensitive factors particularly the effectiveness of their internal auditors. Unlike this reality as per the knowledge of the researcher the issue of internal audit effectiveness in public universities could not get attention as expected. The limited studies conducted on Ethiopian perspective focused more on private universities without considering the public universities. Therefore, this study is to discover determinants of internal audit effectiveness on public universities in Ethiopia according to the framework created by Seid Muhammed (2015).

2.10. Conceptual Framework

Theoretical framework explores, describes, explains, analyzes and presents fact, principle and Provisions of phenomena for better and background understanding of such phenomena (Frank, 1979). To achieve part of the research objective and to test the research hypotheses, this study used the theoretical framework developed by Seid Muhammed, 2015 with some minor modifications.

In this study the dependent variable is internal audit effectiveness, while the independent variables are Audit Quality, Audit Competency, Management Support, Independence of internal audit and Approved Internal Audit Charter. The study is interested in testing the variability of these variables. Do these variables truly in any way affect the internal audit effectiveness or not.

Figure 1 1 Factors Affecting Internal Audit Effectiveness Figure 1: Research Frame Work



Source: (Seid Muhammed, 2015)

CHAPTER THREE

3. RESEARCH METHODOLOGY

This chapter describes the methodology was used in order to conducted the study. It describes the types of methods was selected for data collection and analysis and the reasons for why these methods is chosen in comparison to the other alternative methods. The chapter was consisted of research design research approach, sample design, source of method of data collection, reliability and validity of data collection, method of analysis and interpretation and ethical issues

3.1. Research Design

The study was focus on examining the determinants of internal audit effectiveness of public universities in Addis Ababa. Explanatory design study is helpful when a researcher wants to explain into a phenomenon or a process in its natural contexts in order to get its overall picture instead of taking one or some of its aspects and manipulating it in a simulated or an artificial setting. Hurgler (1995). Explanatory design survey aims predominantly at observing, explain and documenting aspects of a situation as it naturally occurs rather than explaining them. Gay (1992) opined that, explanatory design explains and provides understanding of a phenomenon usually with simple descriptive statistics. So that the researcher used explanatory research design which utilizes quantitative research methods and used co-relation and regression analysis to explain the effects of Audit Quality, Auditors competency, Top Management Support, Independence of internal audit and Approved Internal Audit Charter on internal audit effectiveness.

3.2. Research Approach

As per Creswell (2003) there are three approaches that are used in conducting a given research. These are quantitative, qualitative and mixed research approach. Quantitative research approach focuses primarily on the construction of quantitative data, and quantitative data is a systematic record that consists of numbers constructed by researcher utilizing the process of measurement and imposing structure (Kent, 2007). The quantitative research approach employ measurement that can be quantifiable while qualitative cannot be measured (Bryman & Bell, 2007). In mixed research approach inquirers draw liberally from both qualitative and quantitative assumptions (Creswell, 2009). Qualitative research involves gathering and analyzing non-numerical data, such as text, event, video, and audio, among other non-numeric data, which are used to interpret the

data concepts, opinions, or experiences as well as to understand in-depth insights the needed problem and to discover new research concepts (Kent, 2007).

In this paper the researcher was used mixed research approach; the rationale for combining both quantitative and qualitative data is to better understand a research problem by combining both numeric values from quantitative research and the detail of qualitative research and to neutralize limitations of applying any of a single approach. According to Creswell (2009) the mixed research approach uses separate quantitative and qualitative methods as a means to offset the weaknesses inherent within one method with the strengths of the other method.

3.3. Population of the Study

The populations for this research were the public universities which are found in Addis Ababa city administration. In Addis Ababa there are around 15 public sectors, while most of them have internal audit staff but some public universities haven't internal audit staffs. The populations of the study were all the internal audit staffs, Finance manager and department managers of public universities of Addis Ababa. The logic behind selecting all internal audit staffs, Finance and managers is that have direct relationship with the work of internal audit and this lead to acquire convenience information about determinants of internal audit effectiveness of the organization.

3.4. Sample Size and Techniques

The researcher used the purposive sampling for the section of public university. Lavrakaz (2008) states that a purposive sample, also referred to as a judgmental or expert sample, is a type of nonprobability sample. The main objective of a purposive sample is to produce a sample that can be logically assumed to be representative of the population. Due to the difficulty of covering all the total existing public universities and availability of Internal auditors, the researcher obliged to minimize its study area by focusing only on Ten purposively selected public universities that are located in Addis Ababa expected to be used as a representative of other sectors. These universities are selected purposively, because the use of purposive sampling enables the researcher to generate meaningful insights that help to gain a deeper understanding of the research phenomena by selecting the most informative participants that is satisfactory to its specific needs.

From the total public universities which are found Addis Ababa, the total number of internal audit and finance managers and department managers are 79 in the ten campuses (Located in Addis Ababa).

It is clear that the larger the sampling size of a research, the more accurate the data generated. However, due to time and financial limitations and the nature of the population, the researcher applied simple random sampling to distribute questionnaire. The total sample size was determined by using the following sample size determination formula developed by Taro Yamane (1967). To optimize the sample size from a given a target population size of each stratum. Many researchers suggest that considering the confidence level=95% and margin of error=5% while using the formula is acceptable to have a genuine sample size.

$$n = \frac{N}{1 + Ne^2}$$

Were,

n= number of sample size (79)

N= Total number of study population (99) e=

Level of precision (5%)

$$n = \frac{99}{1 + 99 \times 0.05^2}$$

$$\frac{99}{2475} = 79.35 = 79$$

So, the sample size of study was 79 (28 Auditors, 15 Finance manager & 36 Managers)

3.5. Sources and Method of Data Collection

The sources of the primary data for this study were auditors finance and Mangers of the public universities which are found Addis Ababa. The required data and/or information were obtained through questionnaire in the form of both closed types. The primary data was collected by using structured questioner to the sample Auditors. For this questionnaire was developed from the different published sources and by the researcher disseminated to be filled by the target sample

group. The questionnaire was designed in English language and it has two parts, the first part was question relating to demographic profile of respondents and the second part was about audit practice and effectiveness.

In order to augment the reliability of the data collect by the questionnaire to supplement the data missing in the questionnaire survey, information was acquired from previous works and from different publications was used. The secondary sources of data were generated through a review of relevant documents which includes articles, journals, internet sources and books related of the title.

3.6. Reliability and Validity

Validity refers to the degree to which a study accurately reflects the specific concept that the researcher is attempting to measure or describe. In order to keep the validity of the study, researchers should be concerned with both external and internal validity. Internal validity refers to the extent to which the researcher can demonstrate that he has reliable and adequate evidence for the statement (Grix, 2004). External validity on the other hand stands for the extent to which the conclusion is generalized to the population (Yin, 1994).

Yin (1994) suggested using multiple sources of evidence as the way to ensure construct validity. This study used multiple sources of data including literature and questionnaire that helps to cross validate the data. In addition, the study used instruments developed by Iyoha and Faboyede (2011), and Sharif (2010). Since questions are tested up on their clarity and understandability and significant conclusions are drawn using those questions, it adds both to the internal and external validity of the study. In order to keep the validity, the researcher chose representative respondents which are familiar with the issue and are experts in the field, which enhance the external validity of the result. In this, the validity and reliably of the study presented as follow:

- A pilot test was conducted with persons who were seen as similar to the population for the study. The purpose of the pre-testing was to refine the questionnaire and to assess the validity of measures in Ethiopian context.
- The researcher was selected participants randomly so that characteristics had the probability of being equally distributed and recruits' large sample to account or compare

these outcomes. The researcher was used the similar instrument for pre-test and post-test measures.

- The researcher was also used correctly comments that is provided by the advisor. In terms of external validity, although it was not possible to use several resources' key information would be chosen to review empirical data.

3.7. Method of Data Analysis and Interpretation

The research was planned to use a mixed technique, as was mentioned in the section above. Both qualitative and quantitative assessments were employed to achieve this goal. Data was gathered using a questionnaire, edited, categorized, coded, and encoded, and then analyzed using the Statistical Package for the Social Scientists' descriptive statistics and frequency distribution tools (SPSS). It is helpful to characterize the data's appearance, their location (mean), and how widely they are scattered from one aspect to another of the same data (Leedy, 1989). To determine percentages, mean values, frequencies, regression coefficients, etc., SPSS was utilized. The information gathered from the literature and examinations of the documents was qualitatively evaluated as the primary method for summarizing the data.

3.8. Model Specification

The goal of this analysis was to know the level to which internal audit effectiveness is determined by Audit Quality, Audit Competency, Management Support, Independence of internal audit and Approved Internal Audit Charter by considering R square value, and P-value for the significant of the relation. Mathematical representation. Therefore, the following linear model was formulated for this research in order to test the research hypothesis developed.

$$Y=a+B_1x_1+B_2x_2+B_3x_3+B_4x_4+B_5x_5+e_i$$

Where:

a= Represents the dependent variable that measure level of internal audit effectiveness. To minimize multi-collinearity effect, the dependent variable IAE is determined based on the average score for main independent variables.

X1 to X5 = the coefficient, in which every marginal change in variables on internal auditor's effectiveness affects correspondingly.

e_i = The error term

Y=Internal Audit Effectiveness

X1=Audit Quality

X2=Auditors competency

X3= Top Management Support

X4= Independence of internal audit

X5= Approved Internal Audit Charter

3.9 Variable Definition and measurement

3.9.1. Dependent Variable

The dependent variable for this research is the internal audit effectiveness. In here the internal audit effectiveness are measured in terms of internal auditors' ability to identify non-compliance activities with the offices procedures and policies, and the contributions added by IA to the public universities. Compliance audit is a type of audit service that mostly performed by internal auditors of the organization (Fadzil, F.H et al, 2005). Compliance is defined as 'adhering to the requirements of laws, industry and organizational standards and codes, principles of good governance and accepted community and ethical standards. Compliance also involves ascertaining the extent of compliance with established policies, plans, procedures, laws and regulations, which could have a significant impact on the organization's operations (Fadzil, F.H et al, 2005; MoFED, 2004). Therefore, IA is responsible to regularly assess and verify internal operations conformance with organization's policies and procedures, and then issue compliance report to the concerned body (MoFED, 2004). The added contribution by IA to organizations can be measure in terms of value creation (e.g. its role in the avoidance of corporate failures) and cost saving (Soh and Bennie, 2011; Cohen & Sayag, 2010). In this case study the researcher was measured the IA effectiveness by implementing the internal audit effectiveness of the public universities with the country's auditing environment in which the internal auditor's ability in identifying non-compliance activities and the added contribution by the IA to the universities. Compliance audit is the most audit services implemented in Ethiopian public bodies (Mihret and Woldeyohanes, 2008; MoFED, 2004) while the added contributions by the IA to organization was used by Cohen and Sayag (2010)

to measure the IA effectiveness. Therefore, both dimensions were measured IA effectiveness against the perception of public universities managers. (Balnaves and Caputi, 2001).

3.6.2. Independent Variable

This study was focused on five independent variables that might have an impact on the internal audit effectiveness in the public universities. Those predicted variables investigated in this research are: the audit quality, Audit competency for the IA activity, the top managements support of IA's value, Independence of the IA work, and the approved internal audit charter. It should be noted that the data for the independent variables were collected from the internal auditors, Finance manager & Department managers of the selected public universities. Therefore, the independent variables represent the internal auditors regarding these concepts. Similarly with the dependent variable items, all of the independent variable's items were measured on a five-point Likert-scale where the lowest scale represents strongly disagree and the highest scale represent strongly agree (Likert, 1932). Thirty-Five different item questionnaires were constructed to identified each of the independent variables of the audit quality, auditor's competency, the top management's support, Independence of IA and the approved IA charter the internal auditors finance managers & Managers were asked to express their opinion for those items.

CHAPTER FOUR

4. DATA PRESENTATION AND ANALYSIS

4.1. Introduction

This chapter explains and discusses the results of findings present, analyze and interpret the data collected during the field survey. The results of the study are presented the data collected from different sources results of questioner, and literature. This presentation was based on the responses from the completed questionnaires which were distributed to the respondents. The result of this data was summarized in tabular forms for easy references and analysis. The discussion attempts to accomplish the objectives of the study and answer the research questions. The researcher employed simple percentage and SPSS software for the analysis.

Table 4.1 1 Questionnaires' collection

Item	No	Percentage%
Returned questionnaires	73	92.41%
Used questionnaires	6	7.59%
Total	79	100%

Source: Survey of 2022

A total of 79 questionnaires which were distributed to a sample of respondents which are related to the internal audit from the total 79 questionnaires 73 or (92.41%) questionnaires had usable responses. To this end the results obtained from the survey are analyzed through explanatory method.

4.2. General information of the respondents

The researcher attempts to assess the respondents' age, sex, educational level, and experiences with Auditing in the public university in this section. The age, sex, marital status, and educational level of the respondents are shown in the table below.

Table 4.2 1 Respondents Demographic data

Description		Number of respondents	Percentage (%)
Age	18-30	31	42.47%
	31-40	35	47.95%
	41-50	5	6.85%
	Above 51	2	2.74%
	Total	73	100%
Sex	Male	55	75.34%
	Female	18	24.66%
	Total	73	100%
Marital status	Single	23	31.51%
	Married	49	67.12%
	Divorce	1	1.37%
	Total	73	100%
Academic level	Diploma	19	26.03%
	BA	39	53.42%
	MA	7	9.59%
	Other	8	10.96%
	Total	73	100%

Source: Questioner of 2022

The above table show that, there are respondent age category between 18-30 years are 31, (42.47 %) , between 31-40 years, 35 or (47.95%) are between the year 41-50 years, and 5 or (6.85%) respondent above 51 years 2 or (2.74%). This shows that most of the university auditor employees are young. The gender composition of the respondents 55 or (75.34%) is male and the remaining 18 or (24.66%) are female. This show that most of the university auditor are male. The respondent marital status shows 23 or (31.51%) are single, 49 or (67.12%) of respondents are married and only 1 or (1.37%) of the respondents are divorced within the selected the university auditor. This shows that, most of the employees are married.

On the other side respondents background information, the educational level of respondents of the university auditor, there are 19 (26.03%) respondents have Diploma, 39 or (53.42 %) have BA degree holders, 7 or (9.59 %) of them are hold MA and 8 or (10.96%) respondents have other qualification and other than the above choices specify on questioner. There is no auditor academic qualification less than the below diploma. Which means, most of the auditors of the university are degree holders and qualified to internal audit practice.

Table 4.3 1 Number of Years Serve in the Public University

Item	Frequency	Percentage%
Less than 1 Year	2	2.74%
2-5 Years	26	35.62%
6-10 Years	38	52.05%
Above 10 Years	7	9.59%
Total	73	100.00%

Source: Survey of 2022

Regarding to the service year of the university auditor, 2 (2.74%) respondents work experience are less than 1 years, 26 or (35.62%) respondents work experience between 2-5 years, 38 or (52.05%) respondents work experience between 6-10 years and the other 7 (9.59%) respondents work experience more than 10 years. From this, the researcher infers that most of the university auditors are work experience are between 2-5 years in this service. These shows that the respondents have adequate knowledge about the topic and their experiences are enough to answer the questions.

4.3. Determinants of Internal Audit Effectiveness in Public Universities In Addis Ababa.

4.3.1. Audit Quality

Audit quality has been defined as auditor’s ability on discovering the material misstatement and reports them. So, it has implicit the necessary competence and professional behavior along the auditing process, as well as auditor’s independence and objectivity to assure that the outcome (audit report) reflects the adequate opinion. It must be stated that audit quality is becoming more attractive among other related auditing subjects, due to its considerable impacts on the reliability of the financial statements. Moreover, enhancing the confidence of the financial statement users can be considered as the result of higher audit quality. Hence, through a brief review, we aimed to provide the reader with the principal concepts and recent findings regarding the audit quality criteria (DeAngelo M, 2012).

Table 4.4 1 Audit Quality

Audit Quality	N	Mean	St.Dev
The annual audit plan is determined completely by the internal auditor	73	4.31	0.957
Auditing is conducted on areas which are very significant to the institution.	73	4.52	0.578
The internal audit is able to cover all institutions units and all issues.	73	4.37	0.643
The responses from parties which are being audited are submitted in written form and their response is relevant and comprehensive.	73	4.40	0.728
There is regular follow-up by the internal audit staff to examine actions taken to correct the problems found.	73	2.44	1.732

Source: Survey of 2022

Five questions were distributed to assess audit quality of the public university. The mean response of the four questions under the audit quality practice of the public university were more than 3.00 and the standard deviation were also less than 1.00, which indicates that, the respondent’s perception was close to one another.

The first sub section of the above table under audit quality is related to annual audit plan. In this, majority of the respondents agreed that, the annual audit plan is determined completely by the internal auditor. The second question is related to significant of audit. Most of the respondents assure that, auditing is conducted on areas which are very significant to the institutions. The respondents also agreed that, the internal audit is able to cover all institutions units and all issues.

The other and the fourth question of the above table under audit quality of the public university the form of audit submission. In this, majority of the respondents assured that, the responses from parties which are being audited are submitted in written form and their response is relevant and comprehensive. On the opposite, the respondents don't agree with the question related to the internal audit staff to examine actions. The respondents assured that, the universities don't regular follow-up by the internal audit staff to examine actions taken to correct the problems found.

The general result of the audit quality of the public university show that, the universities have annual audit plan and the area of audit is important to the universities. And also, the audit result of the universities submitted in written form by express each and every audit results. On the contrary, the public university don't timely monitor and take measurement in the audit error and fraud regular.

4.3.2. Auditors Competency

According to literature, it is clear that the auditor's expertise of the auditor plays an important role in improving audit quality. Demanding auditor specialization in an industry leads to a higher level of technical competence and technical information. It is mainly due to auditor's potential ability to detect financial statement errors (Arrunada, 2000). In this case, industry expertise knowledge enhances the likelihood that auditors discover errors, and thereby, affect the probability of reporting the discovered errors (Hammersley, 2006). So, audit quality is positively related to specialization and industry expertise (Lowensohn, Johnson, Elder, & Davies, 2007). In addition, audit tenure is directly related to the industry expertise, because of a new industrial audit client can desire to benefit from audit expertise, technical ability and knowledge. So, auditors will be able to fulfill the lack of client-specific knowledge during the first years of audit tenure (Stanley & Todd DeZoort, 2007).

Auditors Competency	N	Mean	St.Dev
Internal auditors possess sufficient experience to understand the institution's systems.	73	4.33	0.978
The internal audit staffs have the appropriate and relevant education in auditing that allows them to audit all of the institution's systems (financial, operational, logistical and computerized).	73	4.55	0.900
Internal auditors undertake continuous professional development activities (such as professional association sponsored programs and correspondence courses)	73	4.29	0.936
The internal audit staff number & their skill match the scope of institution's internal operations.	73	2.37	1.751
The work of internal audit is performed with modern technology that uses computerized data tools and specific IA software	73	2.01	1.962

Source: Survey of 2022

Five questions were distributed to assess audit competency of the public university. The mean response of the three questions under the audit competency of the public university were more than 3.00 and the standard deviation were also less than 1.00, which indicates that, the respondent perception were close to one another.

The first sub section of the above table under audit competency is related to sufficient experience. In this, majority of the respondents agreed that, the internal auditors possess sufficient experience to understand the institution's systems. The second question is related to internal audit staffs have the appropriate and relevant education. Most of the respondents assure that, the internal audit staffs have the appropriate and relevant education in auditing that allows them to audit all of the institution's systems which are financial, operational, logistical and computerized. The third question is related to professional development activities. The respondents also agreed that, the internal auditors undertake continuous professional development activities (such as professional association sponsored programs and correspondence courses).

The other and the fourth question of the above table under audit competency of the public university on audit staff number & their skill match. In this, majority of the respondents don't

agree with the internal audit staff number & their skill match the scope of institution’s internal operations. In addition to this, the respondents don’t agree with the question related to the internal audit performance and modern technology. The respondents assured that, the universities don’t work of internal audit is performed with modern technology that uses computerized data tools and specific IA.

The general result of the audit competency of the public university show that, the universities internal auditors are well experienced and adopted the universities audit system. In addition to this the internal auditors of the institutions are qualified on the education and capable to the internal audit and they take professional development activities on the audit area. On the opposite, the universities auditors are not enough to perform their duties and the work and the number of auditors doesn’t match and doesn’t use modern technology and specific IA software.

4.3.3. 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 independence for IA work are the results of decisions made by top management (Cohen & Sayag, 2010). This means it is the interest of management to maintain a strong internal audit department. The management is viewed as the customer receiving IA services. As a result, management’s commitment to use audit recommendations and its support in strengthening internal audit is vital to IA effectiveness. Therefore, audit finding and recommendations would not serve much purposely unless management is committed to implement them (Adams, 1994; Mihret and Yismaw, 2007).

Table 4.6 1 Management Support

Management Support	N	Mean	St.Dev
Top level management trusts and values the advice of the internal audit service	73	4.50	0.502
The internal audit service is seen as a key strategic partner throughout the institutions	73	4.41	0.700
Senior managers understand and fully support the work of internal audit	73	4.45	0.587

Internal auditors have full access to records and information they need in conducting audits	73	4.39	0.763
Internal audit obtains a sufficient budget to successfully carry out its duties	73	3.47	0.946

Source: Survey of 2022

Five questions were distributed to assess management support of the public university. The mean response of the five questions under the management support of the public university were more than 3.00 and the standard deviation were also less than 1.00, which indicates that, the respondents perception were close to one another.

The first sub section of the above table under management support is related to management trusts and values. In this, majority of the respondents agreed that, there are the top-level management trusts and values the advice of the internal audit service. The second question is related to strategic partner. Most of the respondents assure that, the internal audit service is seen as a key strategic partner throughout the institution. The third question is related to the senior managers understanding and fully support. The respondents also agreed that, senior managers understand and fully support the work of internal audit.

The other and the fourth question of the above table under management support of the public university on have full access to records and information. In this, majority of the respondents agreed with the internal auditors have full access to records and information they need in conducting audits. In addition to this, the respondents agreed with the question related to the sufficient budget. The respondents assured that; the universities internal audit obtains a sufficient budget to successfully carry out its duties.

The general result of the audit management support of the public university show that, the top and managements and senior managements of the universities have good relation and trust with internal auditors. In addition to this universities have key strategic partner for internal audit service. In addition to this, the universities give enough budget to internal audit to perform their duties and the work and also, fulfill the required access to records and information the record keeping of this public universities.

4.3.4. Independence of Internal Audit

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. Internal auditors should be independent form the activity they are auditing. Independence allows internal auditors to perform the impartial and unbiased judgments to the proper conduct of audit and achieved through status and objective (Simon, 1995). Independence of internal audit is considered by Zhang et al. (2007). The concept of independence is generally used to mean the ability of the auditor to be fair and objective in his/her review and appraisal and not to be under undue pressure from any party to the extent that this could bias his/her opinion. The IA’s Standards for Professional Practice of Internal Auditing (glossary) defines independence of internal auditors as: The freedom from conditions that threaten objectivity or the appearance of objectivity such threats to objectivity must be managed at the individual auditor, engagement, and functional levels (IIA, 2011b). Independence of IA has been identified by the IIA, the American Institute of Certified Public Accountants (AICPA) and others as crucial to the viability of the IA function.

Table 4.7 1 Independence of Internal Audit

Independence of Internal Audit	N	Mean	St.Dev
I freely decide the scope, time and extent of auditing procedures based on auditing standards and the institutions policy.	73	4.34	0.745
The internal auditing operates totally independently, can audit any issue it considers in need of auditing.	73	4.35	0.850
I perform the auditing activities without any interference from anybody and without any influence from the institutions.	73	4.39	0.592
The internal audit staff has free access to information and data about the institutions	73	4.53	0.553
The institutions encourage me to implement my recommendations, to promote value-added activities and to strength internal audit function.	73	4.32	0.767

Source: Survey of 2022

Five questions were distributed to assess independence of internal audit of the public university. The mean response of the five questions under the independence of internal audit of the public university were more than 3.00 and the standard deviation were also less than 1.00, which indicates that, the respondents perception were close to one another.

The first sub section of the above table under the independence of internal audit is related to scope, time and extent of auditing procedures. In this, majority of the respondents agreed that, they freely decide the scope, time and extent of auditing procedures based on auditing standards and the institutions policy. The second question is related to operation independency. Most of the respondents assure that, the internal auditing operates totally independently, can audit any issue it considers in need of auditing. The third question is related to the interference. The respondents also agreed that, they perform the auditing activities without any interference from anybody and without any influence from the institutions.

The other and the fourth question of the above table under the independence of internal audit of the public university on free access to information. In this, majority of the respondents agreed with the internal audit staff has free access to information and data about the institutions. In addition to this, the respondents agreed with the question related to the internal auditors' recommendations. The respondents assured that; the institutions encourage them to implement the internal auditors' recommendations, to promote value-added activities and to strength internal audit function.

The general result of the independence of internal audit of the public university show that, the universities have own policy and procedure for internal audit practice. In this, the universities give high freedom to audit any necessary area and don't interfering on audit works. In addition to this, the universities give free access to internal auditors to get information and data. And also, internal auditor could suggest their finding and comments to the public universities.

4.3.5. Approved Internal Audit charter

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

(IIA, 2001). It may also define access to the information (documents, records, systems, and personnel) necessary to perform and reach conclusions on the work, and it is a vehicle for asserting that there are no 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 forwardlooking perspective (O. Regan.2002).

Table 4.8 1 Approved Internal Audit charter

Approved Internal Audit charter	N	Mean	St.Dev
An internal audit Charter defines the purpose, authority and responsibility, within the institutions, consistent with the definition of Internal Auditing, the code of ethics and the standards	73	4.28	.757
The Charter defines the nature and scope of the assurance and consulting services provided to the institutions (including any assurances provided to parties outside of the institutions) is such that it can provide independent and objective assurance.	73	4.36	.965
The Charter clearly defines internal audit's role effectively	73	3.83	.939
The Charter evaluating and contributing to the development of risk management, control and governance processes Internal audit's role in relation to any fraud-related	73	4.27	.788
The purpose and authority of internal audit charter is in line with "Standards for the Professional Practice" formulated by the Institute of Internal Auditors	73	4.52	.501

Source: Survey of 2022

Five questions were distributed to assess the internal audit charter of the public university. The mean response of the five questions under the internal audit charter of the public university were more than 3.00 and the standard deviation were also less than 1.00, which indicates that, the respondent's perception was close to one another.

The first sub section of the above table under the internal audit charter is related to charter define. In this, majority of the respondents agreed that, the public university an internal audit charter

defines the purpose, authority and responsibility, within the institutions, consistent with the definition of internal auditing, the code of ethics and the standards. The second question is related to assurance and consulting services of the charter. Most of the respondents assure that, charter defines the nature and scope of the assurance and consulting services provided to the institutions which including any assurances provided to parties outside of the institutions and such that it can provide independent and objective assurance. The third question is related to the charter role. The respondents also agreed that, the charter clearly defines internal audit's role effectively.

The other and the fourth question of the above table under the internal audit charter of the public university on the charter evaluating and contributing. In this, majority of the respondents agreed with the charter evaluating and contributing to the development of risk management, control and governance processes internal audit's role in relation to any fraud-related. In addition to this, the respondents agreed with the question related to the standards for the professional practice. The respondents assured that; the universities internal audit purpose and authority of internal audit charter is in line with "Standards for the Professional Practice" formulated by the Institute of Internal Auditors.

The general result of the internal audit charter of the public university show that, the internal audit charter outlines the purpose, authority and responsibility, within the institutions, consistent with the definition of internal auditing, the code of ethics and the standards clearly. In addition to this, which declarations as long as to parties outside of the institutions and such that it can provide independent and objective assurance. And also, the charter monitoring and helps to the development of risk management, control and governance processes internal audit's role in relation to any fraud-related. This clearly defines charter internal audit's role effectively and which is in line with "Standards for the Professional Practice" formulated by the institute of internal auditors.

4.3.6. Internal Audit Effectiveness

Effectiveness is 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. Institution of Internal Audit IIA (2010) defined internal audit effectiveness "as the degree (including quality) to which established objectives are achieved. While Mizrahi and Ness Weisman (2007) give their

own definition which is in line with the ability of the internal auditor intervention in prevention and correction of deficiencies and they finally defined internal audit effectiveness as “the number and scope of deficiencies corrected following the auditing process.” 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 ability of achieving established objective (Ahmad, Othman, & Jusoff, 2009; Mihret et al, 2010).

Table 4.9 1 Internal Audit Effectiveness

Internal Audit Effectiveness	N	Mean	St.Dev
The existing role that the internal audit is playing sufficient enough to address the very purpose for which it is established	73	4.43	.549
The institutions internal audit ensures activity performed is compliance with established policies, procedures, laws and regulations.	73	4.42	.776
Internal audit activity influences positive change and continuous improvement to business processes, bottom line results and accountability within the institutions	73	4.41	.889
Internal audit activity promotes appropriate ethics and values within the institutions	73	4.32	.965
The institutions internal audit of the institution finished timely the task according to the target time	73	2.95	1.359
The institutions Internal Audit finding & recommendations are critical & constructive to improve non-compliances activities or control systems of the institutions.	73	4.59	.927
The non-compliance reports provided by internal audit are reliable and significant to the institutions.	73	4.50	.502
The numbers of complaints (doubts) about the internal audit finding (report) is very low because the report is correct and reasonable.	73	2.57	1.682

Internal audit ensures the economical, effective and efficient use of the institution's resources.	73	4.71	.564
Internal auditors of the organization are fully capable to carrying out internal control function under current corporate governance rules	73	2.67	1.551

Source: Survey of 2022

Ten questions were distributed to assess the internal audit effectiveness of the public university. The mean response of the seven questions under the internal audit effectiveness of the public university were more than 3.00 and the standard deviation were also less than 1.00, which indicates that, the respondents perception were close to one another.

The first sub section of the internal audit effectiveness of the public university is related to the sufficient of internal audit. In this, majority of the respondents agreed that, the public university internal audit existing role that the internal audit is playing sufficient enough to address the very purpose for which it is established. The second question is related to the internal audit ensures activity performed. Most of the respondents assure that, the internal audit ensures activity performed is compliance with established policies, procedures, laws and regulations. The third question is related to the internal audit influences positive change. The respondents also agreed that, the internal audit activity influences positive change and continuous improvement to business processes, bottom line results and accountability within the institutions. In addition to this, majority of respondents assured that, the internal audit activity promotes appropriate ethics and values within the institutions.

The other and the sixth question of the above table under the internal audit effectiveness of the public university on the critical & constructive of internal audit finding. In this, majority of the respondents agreed with the institutions internal audit finding & recommendations are critical & constructive to improve non-compliances activities or control systems of the institutions. In addition to this, the respondents agreed with the question related to the non-compliance reports. The respondents assured that; the non-compliance reports provided by internal audit are reliable and significant to the institutions. In addition to this, most of the respondents assured that, the internal audit ensures the economical, effective and efficient use of the institution's resources.

On the contrary, the respondents opposed the question related to the institutions internal audit of the institution timely finished the task. In this, many of the respondents don't approve with institutions internal audit of the institution timely finished the task according to the target time. In addition to this, the respondents don't agree with the question which are related to the question of complaints about the internal audit finding. Majority of the respondents opposed the low numbers of complaints (doubts) about the internal audit finding (report) because of the report is correct and reasonable. The last question of the internal audit of the public universities are related to internal audit capability and function. Most of the respondents don't agree with the internal auditors of the institutions are fully capable to carrying out internal control function under current corporate governance rules.

The general result of the internal audit effectiveness of the public university show that, the internal audit is in performance sufficient enough to address the very purpose and which is compliance with established policies, procedures, laws and regulations and accountability within the institutions. In addition to this, the internal audit of the public university encourages appropriate ethics and values within the institutions. In this, the institutions internal audit finding & recommendations are necessary to improve non-compliances activities or control systems of the institutions which are helps to ensures the economical, effective and efficient use of the institution's resources. On the opposite, the institutions internal audit practice doesn't finish the task timely and according to the given planned time for their audit. And also, this public universities have many complaints and doubts on their internal audit finding and report. So that, the internal auditors of this public universities are not accomplished to carrying out internal control function under current corporate governance rules and regulation.

4.4. Pearson Correlation Analysis

In statistics, the Pearson correlation analysis is a measure of the correlation (linear dependence) between two variables, giving a value between +1 and -1 inclusive. It is widely used in the sciences as a measure of the strength of linear dependence between two variables. The p-value, in Pearson Correlation analysis, attempts to provide a measure of the strength of results of a test, in contrast to a simple reject or do not reject decision.

In Pearson correlation analysis the value of strength of relationship (r) plays an important role in determining the level of relationships among variables. The significance level, $p < 0.05$ is also used to establish the relationship. This significance level shows that there is only 5 percent chance that the relationship does not exist, and 95 times out of 100 times the relationship among variables can be defined as having significant correlation. The table below shows the results of the Pearson correlation analysis among the variables results.

Table 4.10 1 Pearson correlation

		Correlations					
		IAE	AQ	AC	MS	IIA	AIAC
IAE	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	73					
AQ	Pearson Correlation	.432	1				
	Sig. (2-tailed)	.021					
	N	73	73				
AC	Pearson Correlation	.533	.387	1			
	Sig. (2-tailed)	.010	.301				
	N	73	73	73			
MS	Pearson Correlation	.313	.410**	.079	1		
	Sig. (2-tailed)	.093	.091	.042			
	N	73	73	73	73		
IIA	Pearson Correlation	.415	.422**	.219*	.401**	1	
	Sig. (2-tailed)	.020	.001	.013	.000		

	N	73	73	73	73	73	
AIAC	Pearson Correlation	.745	.409**	.209*	.485**		1
	Sig. (2-tailed)	.001	.010	.000	.005	.025	
	N	73	73	73	73	73	73

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

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

Source: SPSS correlation result

According to the correlation analysis the value of strength of relationship (r) plays an important role in determining the level of relationships among variables. The significance level, $p < 0.05$ is also used to establish the relationship. This significance level shows that there is only 5 percent chance that the relationship does not exist, and 95 times out of 100 times the relationship among variables can be defined as having significant correlation.

The above table depicted that the correlation between the (AQ.AC, MS, IIA and AIAC) and the dependent variable i.e. internal audit effectiveness (IAE). It shows positive relationship between the variables. The independent variables of (AQ.AC, MS, IIA and AIAC) and the dependent variable i.e. internal audit effectiveness (IAE). and independent variables AQ ($r = 0.432$), AC ($r = 0.533$), MS ($r = 0.313$), IIA ($r = 0.415$) AIAC ($r = 0.745$) with ($P < 0.01$) level of significant. The correlation between MS and internal audit effectiveness has a very week value. This mean that all independent variables are positively affect internal audit effectiveness therefore and, the universities should work on all independent variables to utilize the most from internal audit effectiveness. These shows that the hypotheses are supported and were positively correlated.

4.5 Assessment of Ordinary Least Square Assumptions

4.5.1 Assessment of Normality

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

Table 4.11 1 Tests of Normality

Variables	Tests of Normality			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Internal Audit Effectiveness	.164	73	.200*	.883	73	.112
Audit Quality	.256	73	.185	.793	73	.247
Auditor's Competency	.150	73	.200*	.937	73	.311
Top Management Support	.095	73	.194*	.931	73	.254
Independence of Internal Audit	.126	73	.200*	.927	73	.220
Approved IA Chartered	.149	73	.200*	.974	73	.902

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: SPSS correlation result

4.5.2. Assessment of Heteroskedasticity

For the regression output of the model Breusch-Pagan/Cook-Weisberg test for Heteroskedasticity was conducted on stata 12 to test for homogeneity of variance and a P-value of greater than 0.05 were acceptable. As the result revealed in table below p value (= 0.7894) for the model is greater than 0.05 the critical value, shows homogeneity of variance across the model.

Table 4.12 1 Tests of Heteroskedasticity

. estat hettest
Breusch-Pagan / Cook-Weisberg test for Heteroskedasticity
Ho: Constant variance
Variables: fitted values of IAE
chi ² = 0.1800
Prob > chi ² = 0.7894

Source: stata regression result

4.5.3 Assessment of Multicollinearity

Multicollinearity exists when there are strong correlations among the predictors and the existence of r value greater than 0.80, tolerance value below 0.10 and Variance Inflation factor (VIF) greater than 10 in the correlation matrix are the causes for the multicollinearity existence (Field, 2009; 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. **Table**

4.13 1 Collinearity Statistics

Variables	Collinearity Statistics	
	Tolerance	VIF
Audit Quality	.604	1.655
Auditor's Competency	.826	1.211
Top Management Support	.805	1.242
Independence of Internal Audit	.721	1.387
Approved IA Chartered	.890	1.124

Source: SPSS correlation result

As shown in the Collinearity table, the tolerance levels for all variables are greater than 0.10 and the VIF value are less than 10 (see table below), and also the correlation matrix of all the variables have the paired values among the predictors are less than 0.80 (see table) indicates that there were no multicollinearity problems that alters the analysis of the findings, rather it leads to the acceptance of r value, tolerance and VIF values.

4.6 Multiple Regression Analysis

In this section, in examining the internal audit effectiveness. In this, the researcher used a regression analysis to test the internal audit effectiveness.

Table 4.14 2 Testing the model through ANOVA (Goodness of fit statistic)

		ANOVA ^a				
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	27.015	5	5.403	7.95	.000 ^a
	Residual	45.298	67	.68		
	Total	72.313	72			

a. Dependent Variable: Internal Audit Effectiveness (IAE).

b. Predictors: (Constant), AQ.AC, MS, IIA and AIAC

Source: SPSS regression result

The ANOVA statistics in the above table used for this study and the residual that indicates the variation of the dependent variable that are not captured by the model. It is observed that the independent variables give a significant effect on the dependent variable, where F-value is 7.95 with a p value of more than 0.05 (i.e. $p < 0.000$) which are $0.111 > 0.05$. This indicating that, over all, the model used for the study is significantly relationship and the finding imply that AQ.AC, MS, IIA and AIAC have insignificant effect on internal audit effectiveness.

Table 4.15 2 Model Summary

Model Summary ^b			
Model	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.374	0.330	.37785

a. Dependent Variable: Internal Audit Effectiveness (IAE).

b. Predictors: (Constant), AQ.AC, MS, IIA and AIAC

Source SPSS regression result

As shown in the table above, both R2 and adjusted R2 measure the fitness of the model i.e. they measure the proportion of the variation in dependent variable explained by the model. But since adjusted R square is the modification for the limitation of R square the value of the adjusted R square is considered to measure the fitness of the model. Thus, as it is shown on table, the value of adjusted R square is 0.374, indicating that the independent variables in the model are explaining 37% variation on internal audit effectiveness are explained by the variation in AQ.AC, MS, IIA and AIAC have changes in internal audit effectiveness.

Thus, we can understand that the model of the study is providing a good fit to the data. This outcome empirically indicates that the independent variables in this study are the major determinants of internal audit effectiveness

Table 4.16 below shows the results of the regression model. The result reveals that with the exception of MS there exists a significant relationship between independent variables such as AQ.AC, IIA and AIAC and dependent variable, i.e. Internal Audit Effectiveness (IAE).

Table 4.16 2 Regression Analysis

Variable	Coefficients ^a		
	Coefficients	t-static	Prob.
(Constant)	2.369	8.35	.000
AQ	.179	2.487	.016
Ac	.162	2.495	.015
MS	.002	.036	.972
IIA	0.97	2.726	.008
AIAC	.111	2.642	.010

a. Dependent Variable: IAE

As shown in the above table most independent variables shows there is a positive effect of independent variables over the dependent variables which is internal audit effectiveness; meaning

any increases on the independent variables results an increase on the dependent variables. In this study, there is insignificant positive relationship between management support and Internal audit effectiveness with a regression coefficient of 0.002, and P-value of 0.972. The result also reveals that there is a positive relationship between the independent variables.

This finding is consistent with most of the previous studies that are identified in this paper as their study revealed that there is positive relationship between audit quality and internal audit effectiveness. (Shewamene Hailmariam (2014),Mihret and Yismaw, 2007; Cohen & Sayag, 2010; Arena and Azzone, 2009; Al-Twajjry et al. 2004). But this finding is inconsistent with the work of Barac and Van Staden (2009)

4.7. Hypothesis Test

The regression analysis whose results provides a more comprehensive and accurate examination of the research hypothesis. Therefore, the regression results obtained from the model were utilized to test these hypotheses. The hypotheses sought to test for a significant influence of Audit Quality (AQ), Auditor's Competency (AC), management support (MS), independence of internal audit (IIA and the existence of approved internal audit charter (AIAC) on the direct effect of internal audit effectiveness which was measure in terms of internal auditors' ability to identify the noncompliance activities and by their added contributions to the public university.

As can be seen in table above the p value for the AQ, AC, MS, IIA and AIAC are statistically significant.

The following hypotheses test were conducted based on the regression results of the internal audit effectiveness obtained from the regression output.

H1: The Audit quality in the public universities is positively related to the internal audit effectiveness.

The first hypothesis of this research revealed that there was the direct relationship between the audit quality and the effectiveness of IA in the way of identifying noncompliance activities and the ability of IA to add value to the IAE. This hypothesis was supported by the regression result as of the regression results significant related with the IAE at ($P < 0.05$). The regression result highly supports this hypothesis at ($P < 0.01$) and it is a significant positive relationship between Audit quality and IAE, with a regression coefficient of 0.179, t-statistic of 2.487 and P-value of 0.016.

Therefore, the audit quality, results in statistically significant contribution for the internal auditor's ability in identifying the noncompliance activities and their added contribution to the end objective of effective internal audit activities.

Therefore, the existence of adequate and audit quality in the public universities results with positively relationship with IAE and with high contribution for the IAE by 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 the proposed hypothesis (H1).

H2: The Audit competency IA staff in the public university are positively related to the internal audit effectiveness.

The existence of adequate and competent 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 ($P < 0.01$) and it is a significant positive relationship between Audit competency and IAE, with a regression coefficient of 0.162, t-statistic of 2.495 and P-value of 0.015. But this result was inconsistence with some previous auditing researches (Arena and Azzone, 2009; Cohen and Sayag, 2010) they argued that there were no correlation between audit competency with the IA 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.

Therefore, the audit competency of IA staff in the public universities results with positively relationship with IAE and with high contribution for the IAE by 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 the proposed hypothesis (H2).

H3: The management supports are positively related to the internal audit effectiveness in the public university.

The third hypothesis of this research revealed that there were the direct relationship between the management supports and the effectiveness of IA in the way of identifying noncompliance activities and the ability of IA to add value to the IAE. This hypothesis were not supported by the

regression result as of the regression results insignificant related with the IAE at ($P>0.05$). As shown in table above the coefficient 0.002 were positively related but statistically ($t=0.36$, $\rho>0.972$) not significant related with the internal auditor's effectiveness by identifying noncompliance activities and in adding more values to the IA works of the public universities. Therefore, the management supports of internal auditor's values, results in statistically insignificant contribution for the internal auditor's ability in identifying the noncompliance activities and their added contribution to the end objective of effective internal audit activities in their universities.

Even if this variable have a coefficient of positively related with the effectiveness of internal auditors as a result of its insignificant regression analysis output result leads not to support he proposed hypothesis (H3).

But this hypothesis needs a caution; in that insignificance of the management supports in determining the IA effectiveness didn't mean that it doesn't completely contribute to the effectiveness of IA. This result may be happened due to the Independence of internal audit and the available of adequate and competent IA staff highly contributed for the IAE in the public universities. This makes the contribution of the management supports to the IAE insignificance.

H4: The Independence for internal auditors positively related to the internal audit effectiveness in the public universities.

The fourth hypothesis of this research which is assumed to be the determinants of IA effectiveness is the independence of the IA in which internal audit work were conducted. The regression result highly supports this hypothesis at ($P<0.01$) and it is a significant positive relationship between Independence of Internal Audit and IAE, with a regression coefficient of 0.97, t-statistic of 2.726 and P-value of 0.008. As shown in table above the coefficient were positively related with the effectiveness of IA.

Whereas, it is inconsistent with the previous studies conducted by (Cohen, & Sayag, 2010; Van Peursem, 2005) they find that, the more independence to the internal auditors play the vital role in assurance of internal audit effectiveness by freely access of necessary documents, information and data about the audit work, and can provide audit finding /report/ freely and directly to the responsible body, and this all supports the IA effectiveness in their sector.

This may be occurred due to the support to the IA effectiveness and accordingly, the level of independence, reporting level, direct contact to the board and senior management, conflict of

interest, interference, the unrestricted access to all departments and employees, appointment and removal of the head of internal audit, and performing non-audit activity may not be equally perceived. But, without the relevant senior management support simply the independence of the internal auditors may not be enough to add value and to identify the noncompliance activities performed in their office.

Therefore, the independence IA staff and in universities in line with the internal auditor's activity are strong enough to make effective the internal audit in the public universities. IAE insignificant contribution and not to support the proposed hypothesis (H4).

H5: The availability of approved IA charter in the public universities have positive and significant impact on the internal audit effectiveness in the public universities.

The last hypothesis which is proposed to support the effectiveness of internal audit is the existence of approved internal audit charter in the public universities. A well drafted AIA charter is a crucial ingredient for the successful internal auditing effectiveness. The regression result highly supports this hypothesis at ($P < 0.01$) and it is a significant positive relationship between Approved Internal Audit Charter and IAE, with a regression coefficient of 0.111, t-statistic of 2.642 and P-value of 0.010. This indicates the significant impacts of AIAC to increase the ability of internal auditors to identify the noncompliance activities and the more contribution to the public universities. In addition, the result of this hypothesis was consistent with the prior audit researches conducted by (Peursem, 2005; O'Regan, 2002).

Therefore, the existence of approved internal audit charter in the public universities contributes for the effectiveness of internal audit works by facilitating the activities of internal auditors and to make their purpose and authority in line with the standards for the professional practices formulated by the institute of internal auditors in accordance to the rules and regulations of the universities. This strongly supports the proposed hypothesis of the positively related relationship between the availability of AIAC and its significant impact for the internal audit effectiveness (H5).

Finally, the finding obtained on postulated hypotheses is summarized as follow, Summary of hypothesis.

No.	Hypothesis	Decision
H1	Audit quality has negatively and significantly related to the internal audit effectiveness	Accepted
H2	Auditors Competency positively and significantly related to the internal audit effectiveness	Accepted
H3	The management supports are positively and significantly related to the internal audit effectiveness	Accepted
H4	Independence of Internal Audit within the institution positively and significantly related to the internal audit effectiveness	Accepted
H5	Approved Internal Audit charter within the institution positively and significantly related to the internal audit effectiveness	Accepted

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATION

5.1. Introduction

This chapter presents conclusions and implications of the results. It has three parts; the first part presents the conclusions of the study. The second part presents the recommendation and finally, the last part presents possible future research areas.

5.2 Conclusions

This study was examined the determinants of internal audit effectiveness of public universities. The research questions were developed in this study. In this, the study assesses the internal audit practice of public universities which are found in Addis Ababa and determinants of internal audit effectiveness.

- The audit quality of the public university show that, the universities have annual audit plan and the area of audit is important to the universities. And also, the audit result of the universities submitted in written form by express each and every audit results.
- On the contrary, the public university don't timely monitor and take measurement in the audit error and fraud regular.
- The audit competency of the public university show that, the universities internal auditors are well experienced and adopted the universities audit system. In addition to this the internal auditors of the institutions are qualified on the education and capable to the internal audit and they take professional development activities on the audit area.
- On the opposite, the universities auditors are not enough to perform their duties and the work and the number of auditors doesn't match. And used computerized data tools and specific IA software.
- The audit management support of the public university show that, the top and managements and senior managements of the universities have good relation and trust with internal auditors. In addition to this universities have key strategic partner for internal audit service. In addition to this, the universities give enough budget to internal audit to perform their duties and the work and also, fulfill the required access to records and information the record keeping of this public universities.

- The independence of internal audit of the public university show that, the universities have own policy and procedure for internal audit. In this, the universities give high freedom to audit any necessary area and don't interfering on audit works. In addition to this, the universities give free access to internal auditors to get information and data. And also, internal auditor could suggest their finding and comments to the public universities.
- The internal audit charter of the public university show that, the internal audit charter outlines the purpose, authority and responsibility, within the institutions, consistent with the definition of internal auditing, the code of ethics and the standards clearly. In addition to this, which declarations as long as to parties outside of the institutions and such that it can provide independent and objective assurance. And also, the charter monitoring and helps to the development of risk management, control and governance processes internal audit's role in relation to any fraud-related. This clearly defines charter internal audit's role effectively and which is in line with "Standards for the Professional Practice" formulated by the institute of internal auditors.
- The internal audit effectiveness of the public university show that, the internal audit is in performance sufficient enough to address the very purpose and which is compliance with established policies, procedures, laws and regulations and accountability within the institutions. In addition to this, the internal audit of the public university encourages appropriate ethics and values within the institutions. In this, the institutions internal audit finding & recommendations are necessary to improve non-compliances activities or control systems of the institutions which are helps to ensures the economical, effective and efficient use of the institution's resources.
- On the opposite, the institutions internal audit practice doesn't finished the task timely and according to the given planned time for their audit. And also, this public universities have many complaints and doubts on their internal audit finding and report. So that, the internal auditors of this public universities are not accomplished to carrying out internal control function under current corporate governance rules and regulation.

5.3 . Recommendations

This study examines assesses the determinants of internal audit effectiveness of public universities which are found in Addis Ababa. Based on that, the finding, the researcher provides the following recommendations to the public universities.

- The public university don't timely monitor and take measurement in the audit error and fraud regular and the universities auditors are not enough to perform their duties and the work and the number of auditors doesn't match. The researcher recommends that, the management of the companies recommended to support the internal audit works by increasing the number of certified internal auditors by funding the certification fees and by facilitating the way for certification. And also, by facilitating a short-term training to upgrade internal audit staffs' skill.
- The public university internal audit practice doesn't finish the task timely and according to the given planned time for their audit and also, this public universities have many complaints and doubts on their internal audit finding and report. The researcher recommended that, the procedures and processes of the public universities needs to be reviewed to check any obstacle which creates delay in accomplishing task and device a remedial action where there are obstacles to cut down the bureaucratic procedure to a reasonable level. For that necessary assistance should be given to IA staff to accomplish their task without delay.
- The internal auditors of universities to use computerized data tools and specific IA software.
- The internal auditors of this public universities are not accomplished to carrying out internal control function under current corporate governance rules and regulation. For this, the researcher recommended that internal auditors should maintain good reporting structure by creating the way to reporting to the concerned body only and creating a line of reporting as auditing issues only meeting on reliable audit evidence and avoiding the management interest adjustment afar from auditing standards, values and institutions interest.

5.4 . Further Research Areas

The effectiveness of internal audit is a broader scope of service that cannot be dealt with in its entirety in one study alone. This study was conducted to examine the determinants of internal audit effectiveness of public universities which are found in Addis Ababa. More research studies shall be conducted on full-fledged practice of internal audit as they are necessary to universities development in order to further clarify its effect. In addition to this, the study of the future researcher to be extended to collaborate from different stakeholders to fully cooperate for the in-depth interview and included other Ethiopian public universities. So that the findings will be useful identify by compare and contrast each public university.

Table 5 1. Selected University

Campus
Sidist Kilo Campus(Main Campus)
CBE Campus
Arat Kilo campus
Amist Kilo Campus
Yared Art school
Tikur Anbessa Campus
Commerce School Campus
Lideta Campus
Akaki Campus
Yekatit 12 Campus

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