



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

**DETERMINANTS OF INTERNAL AUDIT EFFECTIVENESS: A COMPARATIVE  
STUDY OF ETHIOPIAN SHIPPING AND LOGISTICS SERVICE ENTERPRISE  
AND ETHIOPIAN ELECTRIC UTILITY**

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

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## **ABSTRACT**

*The main purpose of this study was to investigate factors of internal audit effectiveness and to compare the performance of the audit activity between two Ethiopian public sector offices. These are Ethiopian shipping and logistic service enterprise (ESLSE) and Ethiopian electric utility (EEU). The management teams, internal auditors and senior officers of these offices were the source for the required data to the researcher gathered through questionnaires administered with five point likert scale. Eighty data was collected from both organizations. The data collected was then analyzed by descriptive and explanatory method aided by SPSS version 20 data analysis tool. According to the perception of their own employees, organizational independence for auditors both organizations score the lowest point, where both organizations do not have audit committee. In EEU even though the size of the audit department is large, their experience and competence is lower than ESLSE. As a result, the value adding ability is lower than ESLSE. In all measurement, in both organizations, the mean score is just above the neutral point which shows the effort to have effective internal audit need to be improved to reach up to the required level. Based on multiple regression models, the main determinant of the performance of audit activity at EEU is experience and competency of internal audit while the insignificant determinant is Organizational independence. But, the main determinant factor of Value add ability of Internal Auditor and hence performance of the audit activity at ESLSE is management support followed by approved internal audit charter while the insignificant factor is Organizational independence the same as EEU. This research can be used by managers of both organizations to improve their internal audit effectiveness.*

*Key Words: Internal audit; Ethiopian public sector offices; Internal audit effectiveness; Determinants of internal audit effectiveness; Comparison of internal audit effectiveness*

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Frehiwot Geremew

June, 2018

Addis Ababa, Ethiopia

## **DECLARATION**

I undersigned declare that, this paper prepared for the partial fulfillment of the requirements for MSC. Degree in Accounting and Finance entitled “Determinants of Internal Audit Effectiveness: A Comparative Study of Ethiopian Shipping and Logistics Service Enterprise and Ethiopian Electric Utility” is prepared with my own effort. I have made it independently with the close advice and guidance of my advisor.

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Signature       \_\_\_\_\_

Date             \_\_\_\_\_

## **CERTIFICATION**

This is to certify that W/ro Frehiwot Geremew has carried out this research work on the topic entitled “Determinants of Internal Audit Effectiveness: A Comparative Study of Ethiopian Shipping and Logistics Service Enterprise and Ethiopian Electric Utility” under my supervision. This work is original in nature and it is sufficient for submission for the partial fulfillment for the award of MSc. in Accounting and Finance.

Dr. DEGEFA DURESSA

Signature \_\_\_\_\_

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## **Acronyms and Abbreviations**

AC	Approved Internal Audit Charter
EC	Experience and Competence
EEP	Ethiopian Electric Power
EEPCo	Ethiopian Electric Rower Corporation
EEU	Ethiopian Electric Utility
EIA	Effectiveness of Internal Audit
ESLSE	Ethiopian Shipping and Logistic Service Enterprise
IA	Internal Auditors
IAF	Internal Audit Function
IFRSs	International Financial Reporting Standards
IIA	Institute of Internal Auditors
MoFED	Ministry of Finance and Economic Development
MS	Management Support
OI	Organizational Independence
SIA	Size of Internal Audit Department
SPSS	Statistical Package for Social Scientists
VA	Value adding ability

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the organization**

This section presents a brief description of the company profile of the companies under examination first Ethiopian electric utility and then Ethiopian shipping and logistics service enterprise.

#### **Ethiopian Electric Utility**

Electric power was introduced to Ethiopia in the late 19th century, during the regime of Minilik. The first generator was said given to Minilik around the year 1898 to light the palace. In addition to the use of generators, Minilik got constructed the first Hydro power plant on Akaki River in the year 1922 in order to supply power to small factories that had been established in Addis Ababa. Through the years and in light of the socioeconomic development of the country the authority responsible to administer and distribute electric power continued to increase the scope of its operation in order to accommodate new changes. After being in operation for about 68 years in different form and manner, major changes in the objective and structural setup of the organization took place relative to the changes in the socio-economic condition of the country. Accordingly, Ethiopian Electric power corporation (EEPCo) the company had divided in to two separated company by naming Ethiopian Electric Utility (EEU) and Ethiopian Electric power (EEP). So, the Ethiopian Electric utility as public enterprise was established for indefinite duration by regulation No. 303/2013

The purpose of the company is to engage in the business of distributing and selling electrical energy in accordance with economic and social development policies and priorities of the government and to carry on any other related activities that would enable it achieve its purpose. At the time of establishment, The authorized capital of the enterprise is Birr 64,715,822,693.20 (Sixty Four Billion Seven Hundred Fifteen Million Eight Hundred Twenty Two Thousand Six Hundred Ninety Three Birr and Twenty Cents) of which Birr

16,178,955,673.30 (Sixteen Billion One Hundred Seventy Eight Million Nine Hundred Fifty Five Thousand six hundred three Birr and thirty cents) is paid up capital in cash and in kind. The Enterprise has a head office in Addis Ababa, with fifteen regional branch offices. All such activities were delivered to the customers through a man power of around 10,000 employees. Currently, the monthly electricity production capacity of the utility is about 776 GWH and the number of customers was about 2.3 million. The Corporation has been increasing the number of customers by more than 18% annually

### **Ethiopian shipping and Logistics Services Enterprise**

Ethiopian shipping lines was founded in 1964 G.C and started operation in 1966 with three newly built ships and two general cargos and tankers. The company was established as a share company with capital of 50,000.00 Birr, subsequently raised to 3,750,000.00 Birr. Tacprus investment inc. of Washington DC agreed to subscribe to 51% of the capital requirements designating two directors of the company. The Ethiopian government underwrote the remaining 40% of the capital required designating two director. Finally the company has been fully owned by the government of Ethiopia since 1967/70 G.C.

The current Ethiopian shipping and Logistics Services Enterprise is formed by merging the former three public enterprises that have until recently been operating separately in a rather similar and interdependent maritime sub-sector; namely, Ethiopian Shipping Lines SIA.C, Maritime and Transit Services Enterprise and Dry Port Enterprise following the issuance of Regulation by the Council of Ministers (Regulation No. 255/2011) and is vested with the huge responsibility of rendering sea-transport & logistics services to the country's importers, exporters, and investors in a more effective and efficient way, by reducing transit time, cost and handoffs. Besides, a truck operating company named Comet Transport SC has recently been transferred to ESL following a government decree issued in the mid of 2014.

ESL has a multitude of vessels, heavy duty trucks, sea and dry port facilities, chicaneries, etc that enable it render efficient sea and land transport services as well as sea and dry port services. ESL has its headquarters located in the heart of Addis Ababa, Ethiopia, with main

branches at Djibouti, Modjo, and Kality (the former Comet) and other branches in Mekelle, DireDawa, Kombolcha, Semera and Gelan towns. It also has a Maritime Training Institute at a place called Babogaya in Bishoftu (former Debrezeit) Town.

It is the only company involved in sea freight activity in the country. The companies in its long sea transportation services manage to build a reputation of reliability efficiency and good services it gives a liner service in north continent and Mediterranean routs. It also gives a cross trade services mostly from Europe, to red sea, and Gulf ports.

Currently the enterprise introduce multimodal transport system which will benefit the country in many respects, notably by minimizing time loss at transit shipment points, reducing warehouse improve their competitive position in the international market minimizing burden of documentation and formalities, improve safety and security of goods in the country.

## **1.2 Background of the study**

In a modern and dynamic business environment, success of an enterprise highly determined by the control activity such as auditing, formal control system, budget limits and similar control methods implemented in the company. These are powerful brake on the possible deviations from the predetermined objectives and policies, and to mitigate problems arousing in between management and its subordinates, board of directors and management, and investors and board of directors. (Bariyima, 2012; Jung-H & Hui-L, 2010). Among these control systems, internal audit function is one of them and not limited to the operation of any particular function within an organization. For this reason, internal auditing is an important tool for monitoring the profile of a business risk. It also improves the effectiveness and efficiency of an organization (Aaron & Gabriel, 2010).

Internal control involves important activities of the organization to perform its intended purpose. The first is verification of all written records which supposed to be audited. The second is studying and analyzing of policy which is used as the benchmark of auditor can use. The third is evaluation of the logic and completeness of procedures, internal services and staffing to assure they are efficient and appropriate for the organization's policies; and

the forth and the final major activity is reporting recommendations for improvements to management (Eden & Moriah, 1996).

As internal audit is as important tool as briefed above. One of the most important events of the 1980s was the emergence of corporate failures, which later escalated to global financial crisis. In the context of preventing corporate failure, questions have been raised about the effectiveness of internal audit and other forms of auditing (Imhoff, 2003; Mohamad & Muhamad, 2011). Consequently, examining the factors affecting the effectiveness of internal audit is identified by many researchers. For example, Mihiret and Yismaw (2007) listed a number of factors these are: staff expertise; reasonableness of the scope of service; and effective planning, execution and communication of internal audits, management support, organizational setting, organizational policies and procedures.

The purpose of this paper is to investigate the determinant factors of effectiveness of internal audit between two public companies in Ethiopia and compare the degree of impact each determinant factor has on the internal audit effectiveness on each organization. These companies are Ethiopian Shipping and Logistics Service Enterprise and Ethiopian Electric Utility.

### **1.3 Statement of the problem**

In the current dynamic and modern business internal auditors and their function lie at every activities of the corporate governance system as a result it become very important because it is one of the tool to improve the governance. An internal audit function is significant player in basic governance activities such as: monitoring of risks, providing assurance regarding controls, plays a key role in compliance work and also spend considerable time on consulting or operational-oriented work, with the objective of improving the organizations effectiveness and efficiency. Because of this, the presence of strong internal audit benefits all the stakeholders which will provide value to the other cornerstones of corporate governance (Smet & Mention, 2011).

If internal audit is as important as this, it should be as effective as possible so as to be able to contribute more. Creating an understanding regarding internal audit effectiveness of measures in the public enterprise is crucial for concerned organs as well as policy makers. At the same time, effectiveness is determined by some factors such as management support provided for auditors, audit organizational independence, the availability of experienced and competent auditors, size of auditors, and availability of approve charter. A regulation might have positive impact on certain area of efficiency as well as negative impact in other area. Assessment of internal audit effectiveness helps to clearly understand whether there is difference in discrepancies' because of the implementation of certain regulations. Knowing specific area that shows variation because of such regulation enables decision makers in searching for alternative solutions to compensate benefits lost .(Williams, 2012)

As Internal Auditing role has existed for quite a long time in Ethiopia, its function started in the budgetary public sector as part of internal control. Following the issuance of Ministry of Finance directives in 1942, Internal Audit functions is established in the Ministry of National Defense, Ministry of Education, and Ministry of Finance. It was also at this time that the Internal Auditing units began to sprout in non-budgetary public sector (Public enterprise) like Ethiopian Highway Authority, Ethiopian Airlines, Ethiopian Telecommunications, and financial sector that formed the modern layer of the National Economy following (Lemma, 2000)

Considering the above mentioned premise, the researcher attempted to identify the factors influencing internal auditor's effectiveness in Ethiopian shipping and logistics service enterprise and Ethiopian electric utility which are among Ethiopian public sector offices and to compare the performance based on each factor. In doing this, It point out the weakness and the strength of these organizations in terms of internal audit effectiveness. These public sectors have number of branches, large number of personnel and operations as well as these are the sole companies that provide the service across the country. Their operation is very influential on the economy of the country. In order to control their activity, to make them fraud free service and improve the service they are providing the contribution of internal audit should be significant. So, this is to examine the influencing factors of internal audit

effectiveness and to compare statistically the performance of the two organizations based on these factors.

#### **1.4 Objectives of the study**

##### **General objective of the study**

The general objective of this study is to investigate the determinants of internal audit effectiveness in the selected public sector offices.

##### **Specific objective of the study**

The specific objectives of this study are:

- 1) To examine the contributions of management support for IAE in the enterprise
- 2) To examine the contributions of organizational independence of internal auditors for IAE in the enterprise
- 3) To examine the contributions of experience and competency of internal auditors staff for IAE in the enterprise
- 4) To examine the contributions of the size of internal audit department for IAE in the enterprise
- 5) To examine the contributions of approved internal audit charter for IAE in the enterprise

##### **1.4.1 Research Questions**

The research proposed to answer the following research questions;

- 1 Which organization performs better in adding value to the organization through internal audit?

- 2 Do the factors affecting internal audit effectiveness have equal impact on both organizations?
- 3 What are the major factors affecting the Internal Audit Effectiveness of the two publicly held enterprise?

### **1.5 Scope and limitation of the study**

To examine in detail and to see at a close range, this paper focuses only on two public service provider enterprises. As it will be beyond one research paper to investigate all companies on the topic, this restriction is important. But careful consideration and effort is put in to it to select complex, diversified and multimillion companies for the study. Factors that determine the effectiveness of internal audit was analyzed these are management support, organizational independence, experience and competency of internal audit staff, size of internal audit department and presence of internal audit charter and compare their scale of influence on each organization. Because of time and cost of administering questioners at the branch was difficult. It was administered only for managers, auditors and senior officers at the main office this restrict the number of data gathered.

### **1.6 Significance of the study**

The researcher believes that the result of this research project would enable the governing body, specifically the managements, the higher responsible body, and audit function of selected public enterprises, to be aware of the important use of internal audit although it is academic in nature. Also, gives insight on the performance of audit function a company relative to the other and shows how they can use the internal audit service most efficiently. This project paper could be used as an initiation for those who are interested to conduct a detailed and comprehensive study regarding the internal audit effectiveness in Ethiopian Public enterprises.

## **1.7 Organization of the study**

This research paper consists of five chapters. The second chapter describes the detail review of related literatures with regard to the internal audit effectiveness and the variables which affect the internal audit effectiveness. The third chapter expresses the information regarding the methodology used to conduct the research. The fourth chapter is the analysis, discussions and presentation part of the research findings. And finally, the last chapter describe about the conclusions and recommendations of the study followed by the references and appendixes.

## CHAPTER TWO

### LITERATURE REVIEW

This chapter presents review of literature related to internal audit function. It consists of general overview about internal audit function including its evolution, objective, type and activity of internal audit function. In general, this chapter attempts to synthesize existing empirical research in the area of internal audit effectiveness and ends up by summarizing the review and identifying the gap in the existing literature.

#### 2.1 Theoretical Review

##### 2.1.1 Historical Review

###### *2.1.1.1 Evolution and history of Auditing*

The evolution of auditing starts since Mesopotamian civilization with the awareness of mankind for the need to safeguard state and personal property which is as early as 3500 BC. Back then the auditing is performed through marking of financial transactions, which may be construed as a system of verification, internal controls and separation of duties. In the era of Rome Empire, One official compare his records with those of another to entail an application of both separation of duties and verification practice by hearing the proceed was called “hearing of accounts”. This gave rise to the term "audit", from the Latin “Audire” which means to listen. (Rick, Roger, Arnold and Philip, 1999)

In the medieval period, Industrial Revolution in Europe changed the role of auditing that went beyond hearing of accounts to include verification of accounting records and associated supporting documentation. Since Second World War internal audit, has evolved rapidly from the primarily function, which is concerned with financial and accounting matters to the one that addresses the entire range of operation activities. Internal audit profession has advanced primarily as consequences of; the increase size and decentralization of organization, the greater complexity of their operations, and the resulting need for means of monitoring their numerous activities, various government organizations are expected to

have an internal auditing function and an audit committee composed of non management directors. (Irvin, 2000)

In the modern era, technological, political, regulatory, and economic changes that have occurred and witnessed this have significantly affected basic functions and operations of companies. In this respect, the rise of business risks, the economic instability and the increase of financial fraud scandals have necessitated the use of internal audit for companies more than ever. (Drogalas, Karagiorgos & Arampatzis, 2015)

### ***2.1.1.2 Auditing in Ethiopia public enterprise***

An Internal Auditing function has existed for quite a long time in Ethiopia. The internal Auditing function started in the budgetary public sector as part of internal control. Following the issuance of Ministry of Finance directives in 1942, Internal Audit functions is established in the Ministry of National Defense, Ministry of Education, and Ministry of Finance. It was also at this time that the Internal Auditing units began to sprout in non-budgetary public sector (Public enterprise) like Ethiopian Highway Authority, Ethiopian Airlines, Ethiopian Telecommunication, and financial sector that formed the modern layer of the National Economy following (Lemma, 2000; Kedir, Arega & Addisu, 2014)

The formation of the Office of the Auditor General in 1961 (Government of Ethiopia, 1961) with subsequent refinements of duties and responsibilities in 1979 (Government of Ethiopia, 1979) has developed the auditing practice in Ethiopia. By this time, the Financial Administration Regulations No. 17/1997 was issued in which the responsibility of internal audit function was transferred from the Office of the Auditor General to the Ministry of Regulation set out the responsibilities of the Minister of Finance to develop and maintain appropriate standards of work and conduct for application throughout all the public bodies internal audit function and after this financial regulations almost all public bodies established Internal Audit Services. (Wolderuphael, 2000; Kedir et al, 2014)

In 1987 (Government of Ethiopia, 1987) another significant development in public sector auditing in the country have obtained legal recognition for the first time in 1987 through Proclamation No. 13/1987. This proclamation empowered Office of Auditor General

(O.A.G) to direct the Internal Auditors of Government Offices and Public Enterprises in three aspects that are whether accounting records are properly maintained and reliable, whether the assets of the ministries and enterprises are adequately safeguarded and properly maintained; and whether policies and procedures laid down by top officials/management are complied with that implies less attention was given to operational audit as a service to management.( Lemma, 2000)

On July 1, 1997 the Ministry of Finance issued an Operational Audit Manual to strength the Audit function in the Public bodies. According to this manual internal audit services are made to report to the top persons of the organizations. In May 2007 policy directive was issued to further strengthen the Internal Audit service function in the public bodies, however, the legal basis laid down by both in the Regulations of Council of Ministers and the Ministry of Finance Directive is applicable only to internal auditing under the auspices of Public bodies and does not apply to public enterprises and the private sector, but recently Public Enterprises Supervising Authority has issued policy directive for establishment of audit committees in all public enterprises and an audit manual to maintain uniformity of audit work in all public enterprises. (Lemma, 2000; Zeleke, 2007)

### **2.1.2 Definition and objective of Internal Auditing**

An audit of historical financial statements has been defined as:

*“It is a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria, and communicating the results to interested parties. It is a form of attestation service in which the auditor issues a written report expressing an opinion about whether the financial statements are in material conformity with generally accepted accounting principles or other recognized criteria.”* (Lawrence, 1988).

On the other hand, internal audit have a different definition. In the past, internal auditing was defined as:

*“Internal auditing is an independent appraisal function established within an organization to examine and evaluate its activities as a service to the organization.”*  
(Lawrence,1988).

This statement is more an introduction than a definition. It tells little about what internal auditors are responsible for. We will have to look further for a definition that embodies the broad, unrestricted scope of professional internal auditing (Lawrence,1988). Accordingly, the new IIA definition of internal audit is as follows:

*“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.”* (IIA, 2001)

This definition states that scope of internal auditors is assurance and consulting activity.

Assurance services involve the internal auditor’s objective assessment of evidence to provide an independent opinion or conclusions regarding an entity, operation, function, process, system or other subject matter. The nature and scope of the assurance engagement are determined by the internal auditor. Consulting services are advisory in nature, and are generally performed at the specific request of an engagement client. The nature and scope of the consulting engagement are subject to agreement with the engagement client. When performing consulting services the internal auditor should maintain objectivity and not assume management responsibility. (IIA, 2001; Lawrence,1988).

However, the work of the auditor is so much bounded up with the detection of fraud in the eyes of the general public that it is necessary that his interest in fraud should be placed in its proper perspective. Although it is obvious that the detection of fraud with the minimum of delay is a matter of great importance, the efficiency of an internal audit department, however, is sometimes judged by the number of defalcation it uncovers.

“The overall objective of every audit engagement can include four basic aims:

- *to evaluate whether financial statements and accompanying footnotes are in accordance with specified criteria;*
- *to evaluate the effectiveness and appropriateness of internal control systems over financial reporting;*
- *to evaluate the possibility of fraud occurring within the organization;*
- *to evaluate the likelihood that the organization will continue as a going concern.”*  
(Waldron, 1980).

In determining whether financial statements are ‘fairly stated’ or ‘give a true and fair view’ in accordance with specified criteria, the auditor performs appropriate tests to determine whether the statements contain material errors or other misstatements. An integrated approach to auditing considers both the risk of errors and operating controls intended to prevent errors (Waldron, 1980).

### **2.1.3 Types of Internal audits**

As Rick et al (1999) mentioned, Auditing function can undertake different types of audits aimed at improving government accountability, company efficiency etc.... According to Rick Hayes the types of audit are:

#### **Financial audits:**

This type of audit assesses the accuracy and fairness of accounting procedures and financial statements. It is conducted to determine whether the overall financial statements (the quantifiable information being verified) are stated in accordance with specified criteria. Normally, the criteria are the requirements of the applicable International Financial Reporting Standards (IFRSs). The financial statements most commonly comprises of the Balance Sheet, Income Statement, Statement of Changes in Equity, Cash Flow Statement, and Notes to the accounts. (Rick et al, 1999; IIA, 2001)

## **Compliance audits:**

The purpose of a compliance audit is to determine whether the entity is following specific procedures, rules, or regulations set down by some higher authority. A compliance audit for a private business could include determining whether accounting personnel are following the procedures prescribed by the company controller, reviewing wage rates for compliance with minimum wage laws, or examining contractual agreements with bankers and other lenders to be sure the company is complying with legal requirements. An example is the auditing of taxpayers for compliance with the federal tax laws, where the auditor is employed by the government to audit the taxpayers' tax returns. Results of compliance audits are typically reported to someone within the entity being audited rather than to a broad spectrum of users. Management, as opposed to outside users, is the primary group concerned with the extent of compliance with certain prescribed procedures and regulations. (Rick et al, 1999; IIA, 2001)

## **Performance audits**

It is also known as "value for money" audits; analyzing cost effectiveness and operational efficiency. Sometimes these can extend to reviewing the general effectiveness of company in achieving their objectives and act as impact audits. At the completion of an operational audit, recommendations to management for improving operation are normally expected. An example of an operational audit is evaluating the efficiency, accuracy, and customer satisfaction in processing the distribution of letters and parcels by a courier company, evaluating the relevancy and sufficiency of the information used by management in making decisions to acquire new fixed assets, evaluating the efficiency of the paper flow in processing sales etc. In operational auditing, the reviews are not limited to accounting. They can include the evaluation of organization structure, computer operations, production methods, marketing, and any other area in which the auditor is qualified. Efficiency and effectiveness of operations are far more difficult to evaluate objectively than compliance or the presentation of financial statements in accordance with accounting conventions and principles; and establishing criteria for evaluating the quantifiable information in an

operational audit is an extremely subjective matter. In this sense, operational auditing is more like “management consulting” than what is generally regarded as “auditing”. (Rick et al, 1999; IIA, 2001)

## **Other audits**

Specialized audits may be conducted (as part of one of the main audits listed above or separately in their own right) examining issues such as recruitment and management principles, ethics and integrity of the audited work force and others. (Rick et al, 1999; IIA, 2001)

### **2.1.4 Audit activity**

Arens and Azzone (2012) and Rick et al (1999) discussed the major phase of audit activity. Accordingly the audit process is composed of four phases:

#### **Planning phase**

Planning is an essential element in the audit process. It involves in general establishing objectives, understanding systems, prioritizing the audit works including extent of work (deciding on auditable activity or area based on risk assessment), determining resource allocation and other issues. It requires the preparation of:

- Strategic plan – usually the 5-year plan.
- Periodic plan - the annual plan.
- Planning of individual audit assignments. (Arens et al, 2012; Rick et al, 1999)

#### **Audit Execution or the Performance phase**

This involves the implementation of the audit procedures, gathering audit evidence and documenting audit findings, in order to achieve the engagement or audit objectives in accordance with the IIA Standard. Audit evidence is information that forms the foundation, which supports the audit findings and the audit opinion contained in the audit report. It

includes documents and accounting records underlying the financial statements and all other information, which is pertinent to the auditor's examination. Internal auditors should identify, evaluate and record sufficient information to achieve the engagement objectives. (Arens et al, 2012; Rick et al, 1999)

## **Reporting**

This is the phase where the auditor communicates the engagement results properly. Communication should include the engagement's objectives and scope as well as applicable conclusions, recommendations and action plans. Audit observations and recommendations emerge by a process of comparing what should be with what is. Whether or not there is a difference, the internal auditor has a foundation on which to build the report. When condition meets the criteria, acknowledgement in the audit report of satisfactory performance may be appropriate. (Arens et al, 2012; Rick et al, 1999)

## **Follow up**

The audit function should establish and maintain a system to monitor the disposition of results communicated to management. It should establish monitoring procedures to include the following:

- A time frame within which management's response to audit observations and
- recommendation is required;
- An evaluation of management's response;
- Verification of the response (if warranted);
- A follow –up review (if appropriate);
- A communication's procedure for unsatisfactory responses/ actions, including

- The assumption of risk, to the appropriate level of management. Some reported observations and recommendations should be so significant as to require immediate action by management.

These conditions should be monitored by the internal audit unit until corrected because of the effect they may have on the organization. (Arens et al, 2012; Rick et al 1999)

### **2.1.5 Internal audit organization**

The organizational structure of internal audit function widely differs among different organizations. In some organizations IAF have chief audit officer who is member of senior management, but in some other organizations IAF is as part of finance and accounting function. On the other hand it maybe out-sourced or combined with other assurance functions (Nagy & Cenker, 2002).

As per Zain, Subramaniam and Stewart (2006) when the audit committee is involved in key decisions such as the replacement of the chief internal auditor, there will be greater empowerment of the internal function. In other words, management influence over the internal audit function decreases and consequently internal auditors would feel more confident in undertaking audit investigations, particularly when dealing with more sensitive issues that may involve senior management.

Thus structure of internal audit function can be affected by; enacted regulations, company structure, age of an organization, organizational status, activity it intends to perform and others. However, the structure of internal audit function affects its overall activities, which, intends to operate.

Activities of internal audit function differ among organizations depending on the size of an organization, the level of development of professional activities within a given country, corporate governance frame work, and others. Nagy et al, (2002) stated that internal audit changed through time from traditional activities to consulting and value added service. The change is due to management expectation not from the profession is self.

Sawyer and Vinten (1996) noted four benefits managers have gained from internal auditing assistance. Internal auditors should first review and appraise the soundness and adequacy of the accounting, financial, and other operating controls, and promote effective controls at reasonable cost. Secondly, the internal auditors should ascertain the extent of compliance with established policies, plans, procedures, laws and regulations, which could have a significant impact on the company's operations. Then the internal auditors review the means of safeguarding assets and when appropriate, verify the existence of such assets and appraise the economy and efficiency with which resources are employed. Lastly, the internal auditors review operations or programs to ascertain whether results are consistent with established objectives and goals and whether the operations or programs are being carried out as planned.

Țurlea and Ștefănescu (2009) approach the internal audit in terms of its essential role and the support granted to the managing board, "in order to handle the internal control". This opinion consolidates the role of the internal audit, which is to ensure the quality of the existing internal controls, the manner they are applied, the correctness and effectiveness of the implemented strategy, giving courage and confidence to the internal audit.

To sum up activities of internal audit function different among organizations depending on different attributes, through time changed from traditional activities to consulting and value added service.

#### **2.1.6 Internal audit effectiveness**

The word "effectiveness" has been defined in many ways by researchers, for instance:

- According to IIA (2010), internal audit effectiveness is "the degree (including quality) to which established objectives are achieved".
- As per Arena et al (2009) it is "the capacity to obtain results that are consistent with targets objective,"

- As per Mihret, James and Mula, 2010 it is “the extent to which an internal audit office meets its raison d'être, is arguably a result of the interplay among four factors: internal audit quality; management support; organizational setting; and attributes of the auditee”

These definition of effectiveness in terms of achieving the IA goals and objectives, described the characteristics of effective internal audit unit from different point of view the internal audit point of view and the management point of view.

Effective Internal Audit (IA) in auditor's perspective is described by Mihret et al, 2010. Accordingly, by undertaking an independent evaluation of financial and operating systems and procedures it contributes to the achievement of organizational goals, provides useful recommendations for improvements as necessary in order to do this it needs management's commitment to implement recommendations.

Whereas, senior management point of view is described by Sarens and Beelde (2006). Accordingly, the management expect the audit to safeguard of corporate culture, to contribute in organizations corporate governance, to monitor and improve the risk management and internal control system.

These two researchers show that internal audit and management is the interdependent for achieving organizational goals.

## **2.2 Empirical Review**

### **2.2.1 Determinant factors of Internal audit effectiveness**

As the main aim of this research is to assess the effectiveness of internal audit in the public enterprise, different authors and researcher's idea and recommendations regarding the determinant factors of internal audit effectiveness are analyzed and presented as follows:

### ***2.2.1.1 Management Support***

The interaction and relationship between senior management and internal auditors and the internal audit function is both important and complex. For example, senior management is required to be involved in the internal audit plan and its input; and internal audit is required to provide senior management with sufficient, reliable and relevant reports about the work performed, conclusions reached and recommendations made.

Internal auditors 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.

One of the first component management supports is their perception towards internal audit. According to Flesher and Zanzig, 2000, in order to function effectively, internal auditors and the customers of audit services should possess a similar understanding of what makes internal auditing a value added activity. The failure to reach this understanding could result in the perception that internal audit is simply an obstacle to achieving production objectives. This can result in underutilized audit services and ignored audit recommendations.

The second component is the commitment to strength internal audit with adequate resources, budget, 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. The overall acceptance and appreciation of IA within the company is strongly dependent upon the support they receive from senior management (Adams, 1994; Mihret & Yismaw, 2007).

The last component is implementation of audit recommendations which is highly relevant to IA effectiveness which is the component of management support. The top management of an organization can be considered as a customer for internal audit. As a result,

management's commitment to use audit recommendations and its support is like using the service provided by the supplied which strengthening internal audit is vital to IA effectiveness. (Sarens et al, 2006; van Gansberghe, 2005; Mihret et al, 2007)

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 function(IAF) that in turn needs appropriate governance structure, mobilizing sufficient and appropriate resource and competent personnel.

### ***2.2.1.2 Organizational Independence***

IIA requires that the internal audit department must be independent and internal auditors must be objective in achieving their work to add value to the organization. Independence is the freedom from conditions that threaten the ability of the internal audit activity to carry out internal audit responsibilities in an unbiased manner. The concept of independence refers to being free from any management influence while internal auditors perform audit activities and issue audit report (Belay, 2007; MoFED, 2004). According to Stewart et al 2010, "the assurance services provided by auditors derive their value and credibility from the fundamental assumptions of independence of mind and independence in appearance" (Stewart & Subramanian, 2010)

AS it is stated by Mihret et al, 2010, "Organizational setting includes the status of internal audit in the organizational structure; the probity of internal audit office's internal organization; budgetary status of the internal audit office; and the existence of sound established criteria to evaluate auditees' practices. In order to make internal auditing effective, there should exist clear policies and procedures against which organizational practices are to be gauged." the 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.. For these reason, 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 et al, 2010; Van Peurse, 2005; Bou-Raad, 2000).

Having all this evidence about the importance of independence of audit organization, it is very crucial to discuss the contribution of having audit committee in the organization. Audit committee is a committee of the board of directors; one of the important roles of this committee is focuses on all aspects of financial reporting. (Mahboub, 2013)

The Audit Committee of the Board of Directors provides one very significant aspect of corporate governance. An Audit Committee can be very effective not only in providing objective oversight of the accounting of an organization, but also in helping to set an ethical “tone at the top” (Locatelli, 2002). An audit committee in organization improves the independence internal audit of organization. (Deborah, 2004)

The Audit Committee should require periodic written reports from the Internal Audit department (Locatelli, 2002). Some of the main functions of this committee include:

- Review and assess financial reporting system
- Provides appropriate direction and consider the operations of all audit functions
- Fulfillment of internal control system (Mahboub, 2013)

### ***2.2.1.3 Competency and experience of Internal Audit Staff***

The competency and experience of internal audit are the critical characteristics of IA quality. Staff competence is clearly identified in the professional literature as a key element in effective audit activity (IIA, 2006). Appropriate staffing of an internal audit department and good management of that staff are keys to the effective operation of an internal audit. A full range of audit activity requires professional staffs that collectively have the necessary education, training, experience and professional qualifications to conduct audits required by its mandate (Al-Twajry, Brierley & William, 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 IAF is the quality of its internal auditing staff measured in terms of internal auditors skill (Seol, Sarkis & Lefley, 2011; Leung & Cooper, 2009; Seol & Sarkism, 2006).

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 enhances 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 et al, 2010; Leung et al, 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.

#### ***2.2.1.4 Size of Internal Audit Department***

Any function in an organization has to be equipped with sufficient resources if it is to discharge its responsibilities appropriately and suitably. Accordingly, sufficient number of internal auditor is important for the effectiveness of its contribution which is essential to improve performance of companies. Many researchers support this statement. Lipton and Lorsch (1992) suggested the suitable number of staff is important. Also, Firsteberg and

Malkiel (1994) claimed that a right size of internal audit staff encourages greater concentration, participation and authentic interactions and discussion. Consistent with the above, Shaver (2005) argued that larger size are often characterized by responsibility diffusion, which leads to social loafing, it encourages group fractionalization and minimizes group commitment to modifying strategy. Consequently, 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 more healthy 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

From the perspective of resource dependence theory, it postulates that larger size would result in superior corporate performance owing to the various skills, knowledge, and expertise contributed into the boardroom debate. In addition, large size could also offer the diversity that would assist companies to obtain critical resources and minimize environmental risks (Goodstein, Gautam & Boeker, 1994).

#### ***2.2.1.5 The Approved Internal Audit Charter***

IIA define internal audit charter as:

*“It is a formal written document that defines the activities, purpose, authority and responsibility of the auditor. The charter should be*

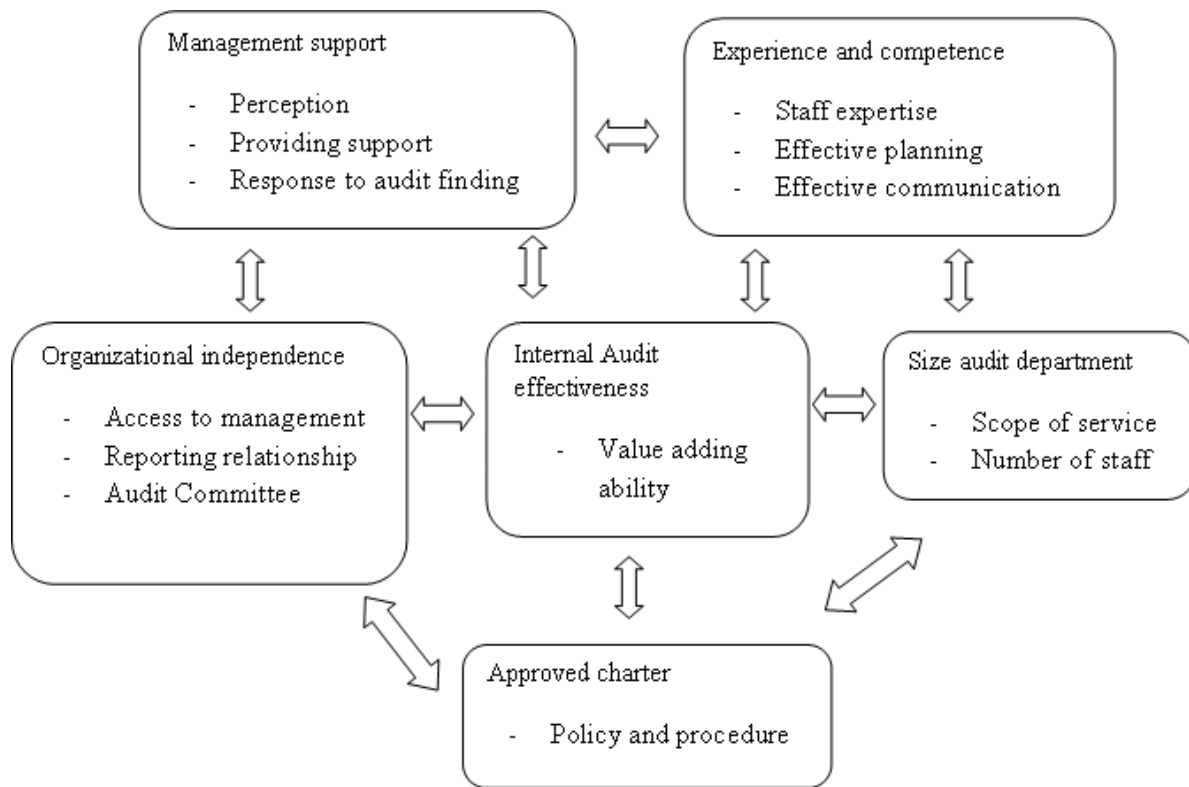
- *Establish the internal audit activity’s position within the organization*
- *Authorize access to records, personnel and physical properties relevant to the performance of managements; and*
- *Defined the scope of internal audit activities” (IIA, 2001).*

According to O’Regan (2002), It is defined as access to the information such as 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 Peursem (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 Peursem, 2005) which in turn affects IA effectiveness.

### 2.3 Theoretical framework of the study



**Figure 0-1 Factors affecting IAE-Theoretical framework**

(Source, adopted from Mihret et al, 2007)

### 2.4 Summary and research gap

In the current dynamic global market, the presence of effectiveness of internal audit both important and necessary. Because of this it attracts the attention of many researchers. They have been studying and numbers of studies were conducted in IA related and organizational characteristics to the effectiveness of its function. Mu'azu and Siti, 2013, listed the number of studies that were conducted from 2000 to 2013GC. Among these researches many has focused on its function, importance and factor affecting its effectiveness.

Accordingly, different authors consider different factors. Some of the factors that are not review on this paper are management perception, relation between internal and external

auditor, and audit attribute can be mentioned. (Abdulaziz & Nadal, 2013; Cohen et al, 2010). On this paper management support, organizational independence, experience and competency of auditor, size of audit department and approved audit charter are briefly explained how they affect the output of audit. As discussed in the previous sections, these factors influence the likelihood of detecting and self reporting fraud within the organization.

The current research is to compare the determinants of internal audit effectiveness in the selected public offices based on the management support, organizational independence, existence of experienced and competent internal auditor staff, the size of internal audit department and the presence of approved internal audit charter. Many researcher have identified the factor here a comparative research is presented.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

This chapter contains a discussion of the approach used in carrying out the research. The areas covered include the population, sample and sampling technique, data collection instruments, type of data collected and sources, and administration of the questionnaires.

#### **3.1 Research Approach**

The research Methodology is the general approach the researcher takes in carrying out the research project; this approach dictates the particular tools the researcher selects (Leedy & Ormrod, 2010). Quantitative research approach typically involves many cases and many variables that are measured in a predetermined and specific way. The data are numeric and can be summarized numerically (O'Sullivan, Rassel & Berner, 2010).

For this study quantitative research approach was used since it allows exploring the mean value of the respondent perspective which uses for comparison which it makes possible to summarize and interpret the numbers by using statistical tools.

#### **3.2 Research Design**

Research design is the plan and structure of investigation so conceived as to obtain answer to research questions. The design provides answers about the techniques to be used to gather data, kinds of sampling (Cooper & Schindler, 2003). Among the different classifications of quantitative research, descriptive and explanatory research design was used for this study. The choice of descriptive and explanatory design for this study was appropriate since this study aimed to investigate and compare the effectiveness of internal audit in two organizations.

#### **3.3 Survey design**

This study had intent to assess and compare the effectiveness of internal auditing in Ethiopian public enterprises. To do this, the methods that were employed are survey design.

Survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. Its purpose is to generalize from a sample to a population so that inferences can be made and it is also economical and rapid turnaround in data collection (Creswell, 2003). This survey is conducted by means of self-administered questionnaire, with in selected public enterprises; questionnaires were distributed to senior officers, internal auditors and managers.

### **3.3.1 Population, Sample selection and Data Collection**

#### ***3.3.1.1 Population and sampling method***

A population is the total collection of elements about which we wish to make some inferences (Cooper et al, 2003). Population is the total set of units in which the investigator is interested, that is, the larger set from which the sample is drawn (O’Sullivan et al., 2010). The target population must be specified clearly. An investigator may find it useful to start by defining the population as the ideal one required to meet the study objectives. This could be the target or theoretical population. The definition would then be modified to take account of particular limitations; the modified definition is the study population. The study population is a set of units that the investigator can access (O’Sullivan et al., 2010).

The study population for this research is senior officers, auditors and managers of EEU and ESLSE as the objective of the paper is focused on them; which makes the sampling method purposive. The reason is these groups of population are at a close range at the recommendation and criticism of audit in their own service unit.

#### ***3.3.1.2 Sample Size***

Survey sampling is the process of choosing, from a much large population, a group about which the researcher wish to make generalized statements so that the selected part will represent the total group (Creswell, 2003). The population considered in this study is selected from the employees of the Enterprises located in the main office. In order to do this, purposeful sampling method was used. Accordingly, the population is the sum of internal auditors, senior officers and managers. Based on this, the sample size is calculated

by a simplified formula as discussed by Ajay and Masuku (Ajay & Masuku, 2014). The formula is:

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

Where:

n is the sample size

N is the population size

e is the level of precision

By using this formula the sample size for this research was calculated as follows:

**Table 0-1. Sample size**

No.	Organization	Population				Precision (e)	Sample size (n)
		Internal auditors	Senior officers	Managers	Sum (N)		
1	EEU	19	22	25	66	0.05	57
2	ESLSE	15	19	23	57	0.05	50

Source: Researcher own compilation (June, 2018)

For the fairness of comparison equal number of sample was selected. Accordingly, the researcher has selected a total of 100 samples from both organizations which means 50 from each.

### **3.3.1.3 Data Collection instruments**

The primary data were used for the study, and to collect the data from the respondents included in the sample questionnaires were distributed. The questionnaires were distributed

to the managers, senior officers and the internal auditors of the organization. The questionnaires was adopted and modified from the prior authors and literature review (Mihret et al, 2007; Cohen et al, 2010; Arena et al, 2009), an approach which is recommended in methodological literature for studies of this nature (Bryman and Bell, 2007) and those questionnaires were prepared in the form of Likert-Scale type (showing respondents agreement or disagreement) by constructing into five point scale where the lowest scale represent strongly disagree and the highest scale represent strongly agree (Likert, 1932).

Accordingly, 100 questionnaires were distributed to the employees of both organizations. Among these only 80 of them have returned and completed most of the items.

### **3.4 Data analysis techniques**

Once the data is collected by questionnaires, it was analyzed to see the value adding ability of internal auditor and the factor affecting its effectiveness. Descriptive statistics was used to describe the effect of management support, organizational independence of the IA work, the experience and competent internal audit staff, size of internal audit department and the presence of approved internal audit charter on the effectiveness of internal auditors and to compare the result between the two public organizations. And, multiple regression analysis was conducted to determine the effect of each variable on internal audit effectiveness. SPSS was used to perform the data analysis and the analyzed data is presented using tables.

### **3.5 Variables in the research**

The only dependent variable for this research is the internal audit effectiveness. The data for this variable is collected from questionnaire that is distributed to managers and division head. 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 organization.

There are five independent variables that might have an impact on the internal audit effectiveness in the organization. Those predicted variables investigated in this research are:

the managements support for the IA activity, organizational independence of the IA work, the experience and competent internal audit staff, size of internal audit department and the presence of approved internal audit charter. It should be noted that the data for the independent variables were collected from the internal auditors of the respective organization.

The variables are defined as follows:

**Effectiveness of Internal Audit:** the extent to which internal audit contributes to the demonstration of effective and efficient service delivery, adding a value to the organization, as this drives the demand for improved internal audit services. (Mihret et al, 2007)

**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. (Mihret et al, 2007)

**Organization Independence:** It refers to the concept of being free from any management influence while internal auditors perform audit activities and issue audit report (Belay, 2007; MoFED, 2004).

**Experience and Competence of IA:** the internal auditors should possess the knowledge, skill and other competencies need to perform their responsibilities (IIA, 2001).

**Size of Internal Audit Department:** sufficient number of internal auditor is important for the effectiveness of its contribution. (Lorsch, 1992)

**Approved Internal Audit Charter:** access to the information such as 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).

### 3.6 Model Specification

Accordingly, regarding to the independent & dependent variables of the study, the model of this study was:-(Here the same model is used for two different companies-EEU and ESLSE)

$$VA = \beta_0 + \beta_1 MS + \beta_2 OI + \beta_3 EC + \beta_4 SIA + \beta_5 AC + E_i$$

Where:-

VA = **Value add ability of Internal Auditor** (Dependent variable of the study)

$\beta_0$  = constant or intercept

MS= **Management Support** (an independent Variable)

OI= **Organizational independence** (an independent Variable)

EC= **Experience and competency of Internal audit** (an independent Variable),

SIA = **Size of internal audit department** (an independent Variable)

AC = **The approved internal audit charter** (an independent Variable)

$\beta_1$ = the coefficients for **MS**

$\beta_2$ = the coefficients for **OI**

$\beta_3$ = the coefficients for **EC**

$\beta_4$ = the coefficients for **SIA**

$\beta_5$ = the coefficients for **AC**

$E_i$  = Error factor

### 3.7 Hypothesis

The following hypotheses are to be tested:

**Null Hypothesis (H0):** Management Support has no significant effect on Value add ability of Internal Auditor (performance of the audit activity)

**Alternative Hypothesis (H1):** Management Support has a significant effect on Value add ability of Internal Auditor (performance of the audit activity)

**Null Hypothesis (H0):** Organizational independence has no significant effect on Value add ability of Internal Auditor (performance of the audit activity)

**Alternative Hypothesis (H1):** Organizational independence has a significant effect on Value add ability of Internal Auditor (performance of the audit activity)

**Null Hypothesis (H0):** Experience and competency of Internal audit has no significant effect on Value add ability of Internal Auditor (performance of the audit activity)

**Alternative Hypothesis (H1):** Experience and competency of Internal audit has a significant effect on Value add ability of Internal Auditor (performance of the audit activity)

**Null Hypothesis (H0):** Size of internal audit department has no significant effect on Value add ability of Internal Auditor (performance of the audit activity)

**Alternative Hypothesis (H1):** Size of internal audit department has a significant effect on Value add ability of Internal Auditor (performance of the audit activity)

**Null Hypothesis (H0):** Approved internal audit charter has no significant effect on Value add ability of Internal Auditor (performance of the audit activity)

**Alternative Hypothesis (H1):** Approved internal audit charter has a significant effect on Value add ability of Internal Auditor (performance of the audit activity)

## **CHAPTER FOUR**

### **DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

This chapter presents the results of the study based on the analysis of the data collected from the respondents and discussion of results on the basis of the literatures. As indicated in the previous chapter, the main attempt of this study is to investigate the determinants of internal audit effectiveness in the selected public sector. Therefore, the analysis and discussions for research findings obtained from the questionnaires. It reports the investigation results obtained from managers, internal auditors and senior officers of the two public sector offices covered in the questionnaire. The discussion begins with the questionnaires' response rate for both organization followed by the descriptive statistics of the respondents by comparing the mean and the frequency of the response.

The results of the study based on the analysis of the data collected from the respondents and discussion of results on the basis of the literatures. As indicated in the methodology section the study conducted basically using questionnaire filled by respondents. A total of 100 questionnaires were distributed both organizations share the questionnaires equally and 95 were returned. The aggregate response rate is 95% but due to the incompleteness of data and for balancing the data 15 questionnaires were discarded. Therefore, 80 questionnaires were considered for the data analysis. The data received from the respondents were analyzed with the help of statistical software program SPSS version 20.

#### **4.1 Descriptive statistics**

##### **4.1.1 Demography of respondent**

The demography of the two organizations is presented as follows:

**Table 0-1. Demography of EEU**

		Frequency	Percent	Valid Percent
<b>Field of study</b>	Accounting	17	42.5	42.5
	Management	14	35	35
	Other	9	22.5	22.5
	Total	40	100	100
<b>Level of education</b>	Bachelor Degree	23	57.5	57.5
	Masters Degree	17	42.5	42.5
	Total	40	100	100
<b>Experience</b>	1-4	5	12.5	12.5
	4-8	8	20	20
	8-12	9	22.5	22.5
	12- 16	8	20	20
	>16	10	25	25
	Total	40	100	100

Source: SPSS output from survey data (June, 2018)

As it is depicted in table 4.1 above, 42.5% of the respondents have studied accounting and 35% have studied management. The other 22.5% of the respondent were graduated in different fields. In the case of level of education, 57.5% of have bachelor and 42.5% have master level degree. The experience distribution of the respondent's shows that 12.5% them were between 1 and 4 years of experience and 20% of them were having experience between 4 to 8 years. 22.5% and 20% of them were having and experience of up to 12 and 16 years respectively. The remaining 25% have above 16 years.

**Table 0-2. Demography of ESLSE**

		Frequency	Percent	Valid Percent
<b>Field of study</b>	Accounting	14	35	35
	Management	21	52.5	52.5
	Other	5	12.5	12.5
	Total	40	100	100
<b>Level of education</b>	Bachelor Degree	21	52.5	52.5
	Masters Degree	19	47.5	47.5
	Total	40	100	100
<b>Experience</b>	1-4	3	7.5	7.5
	4-8	7	17.5	17.5
	8-12	8	20	20
	12- 16	11	27.5	27.5
	>16	11	27.5	27.5
	Total	40	100	100

Source: SPSS output from survey data (June, 2018)

As presented in table 4.2, 35% of the respondents have studied accounting and 52.5% have studied management. The other 12.5% of the respondent graduated in different field. In the case of level of education, 52.5% of have bachelor and 47.5% have master level degree. The experience distribution of the respondent's shows that 7.5% of the them were between 1 and 4 years of experience and 17.5% of them have experience between 4 to 8 years. 20% and 27.5% of them have and experience of up to 12 and 16 years of experience respectively. The remaining 27.5% have above 16 years.

### 4.1.2 Audit Committee

According to the survey both organization do not have audit committee.

As it is discussed in the literature review, the importance of audit committee, of the board is to lead auditors in an independent form. In the absence of audit committee of the board, internal auditor may report to the CEO, which may compromise their independence.

### 4.1.3 Category of questionnaire items

To ease the analysis of the data the questionnaire which is the items in the likert scale is categorized in to six groups. The category is performed according to the literature review. And, the following table shows the category:

**Table 0-3. Likert item category**

No.	Variable Name	Symbol	No. of likert item
1	Value adding ability	VA	11
2	Management Support	MS	6
3	Organization Independence	OI	6
4	Experience and Competence of IA	EC	7
5	Size of Internal Audit Department	SIA	3
6	Approved Internal Audit Charter	AC	7

Source: Researcher own compilation, (June, 2018)

## 4.2 Descriptive analysis

### 4.2.1 Comparison by category

All the variables listed on the questionnaires were categorized by the factors affecting the effectiveness of the audit which are discussed in the literature review that are management support (MS), Organizational independence of audit (OI), Experience and competence of auditor in the organization (EC), Size of audit department (SIA), and the existence of

approved audit charter in the organization (AC) and the others are categorized as the ability of audit to add value to the organization (VA). Accordingly the mean value and the standard deviation of both organizations are shown in the following table 4.4:

**Table 0-4: Mean value by category**

	ESLSE Mean	ESLSE Std. Deviation	EEU Mean	EEU Std. Deviation
Value adding ability (VA)	3.60	0.82	3.09	1.03
Management Support (MS)	3.55	0.86	3.37	0.98
Organizational Independence (OI)	2.73	1.13	3.10	0.99
Experience & competence (EC)	3.58	0.83	2.96	1.09
Size of Internal Audit (SIA)	3.18	1.02	3.46	0.91
Approved Charter (AC)	3.49	0.89	3.06	1.04

Source: SPSS output from survey data (June, 2018)

Table 4.4 shows the average score for employee's perception towards the value adding ability of auditors in EEU and ESLSE and the factors affecting the effectiveness of audit given by 80 respondents on a likert scale of 1 up to 5. It shows that the average score for value adding ability category is 3.6 with a standard deviation of 0.82 for ESLSE and 3.09 with a standard deviation of 1.03 for EEU, in management support category the mean value is 3.55 with a standard deviation of 0.86 for ESLSE and 3.37 with a standard deviation of 0.98 for EEU, in organizational independence category the mean value is 2.73 with a standard deviation of 1.13 for ESLSE and 3.10 with a standard deviation of 0.99 for EEU, in experience and competence category the mean value is 3.58 with a standard deviation of 0.83 for ESLSE and 2.96 with a standard deviation of 1.09 for EEU, in size of audit department category the mean value is 3.18 with a standard deviation of 1.02 for ESLSE and 3.46 with a standard deviation of 0.91 for EEU, and finally in the availability of approved charter category the mean value is 3.49 with a standard deviation of 0.89 for ESLSE and 3.06 with a standard deviation of 1.04 for EEU. The standard deviation shows that how the values far from the mean. In the above table it is shown that the standard

deviations of all the variables are small, which indicates the values in the data set are closer to the mean.

As it is presented in the above table 4.4 in all the categories the mean value of ESLSE is greater than EEU except size of audit and independence where EEU is better. For both organizations mean score of organizational independence is the lowest score. The highest score for EEU is size of the department whereas the highest score for ESLSE is Value adding ability.

As per the literature review, the effect of the determinant factor is visible in the result. Because the mean score of the factors are little higher than 3 which is the same as value adding ability. The other point is the size of audit does not affect the value adding ability if experience and competency is poor. Which mean in case of EEU the size of audit department is higher than ESLSE but its experience and competency lower as a result the value adding ability is not higher than ESLSE.

## 4.2.2 Comparison by individual variables

### 4.2.2.1 Value adding ability of Audit

**Table 0-5: Value adding ability of EEU**

VA EEU	Frequency						Mean	Std. Deviation
	N	SD	D	N	A	SA		
Internal auditors can effectively identify and report any non compliance activities with my office's/sector's policies and procedures. (V1)	40	3	10	7	18	2	3.15	1.099
	%	8	25	17.5	45	5		
Internal Auditors provide useful recommendations and constructive criticisms on non-compliances activities of the office/sector. (V2)	35	1	10	8	13	3	3.2	1.052
	%	3	25	20	32.5	7.5		
The organization uses the recommendations, criticisms and information provided by internal auditor for decision making. (V3)	37	4	15	6	12		2.7	1.051
	%	10	37.5	15	30			
The non-compliance reports provided by internal auditors are reliable and significant to my organization/sector. (V4)	39	2	11	9	17		3.05	0.972
	%	5	27.5	22.5	42.5			
Internal audit ensures the economical, effective and efficient use of resources in my office/sector.(V5)	38	1	7	12	17	1	3.26	0.891
	%	3	17.5	30	42.5	2.5		

VA EEU	Frequency						Mean	Std. Deviation
	N	SD	D	N	A	SA		
In my office/sector internal audit ensures activity performed is compliance with established policies, procedures, laws and regulations.(V6)	40	4	10	9	16	1	3	1.086
	%	10	25	22.5	40	2.5		
The recommendations of internal audit department provide practical, cost-benefit solutions for correcting the problems that were found. (V7)	37	2	6	11	17	1	3.24	0.955
	%	5	15	27.5	42.5	2.5		
The existing role that the internal audit is playing sufficiently to address the very purpose for which it is established (V8)	35	2	10	6	16	1	3.11	1.051
	%	5	25	15	40	2.5		
Internal auditors in your company are capable of carrying out internal control function under current corporate governance rules (V9)	38	5	17	3	13		2.63	1.101
	%	13	42.5	7.5	32.5			
The existence and findings (reports) of Internal Auditors meet my expectations. (V10)	39	1	8	11	19		3.23	0.872
	%	3	20	27.5	47.5			
The internal auditor reports are highly considered for decision making and internal controls by the management. (V11)	40	3	4	9	22	2	3.4	1.008
	%	8	10	22.5	55	5		

Source: SPSS output from survey data (June, 2018)

The table 4.5 shows the result of employee’s perception about the ability of audit department to add a value to the organization in EEU. The response of the respondents for the nine statements/items has mean value greater than 3 and the other two are less than this. The respondents have agreed positively on nine items have a frequency greater than 40% on the other two items they disagreed with a percentage of 37.5% and 42.5%. On seven items the neutral perception is more than 20% of the respondent. The higher frequency on having strongly disagreed with the item is 13%.

**Table 0-6: Value adding ability of ESLSE**

VA ESLSE	Frequency						Mean	Std. Deviation
	N	SD	D	N	A	SA		
Internal auditors can effectively identify and report any non compliance activities with my office’s/sector's policies and procedures. (V1)	37			10	24	3	3.81	0.569
	%			25	60	7.5		
Internal Auditors provide useful recommendations and constructive criticisms on non-compliances activities of the office/sector. (V2)	36		4	11	17	4	3.58	0.841
	%		10	28	43	10		
I use the recommendations, criticisms and information provided by internal auditor for decision making. (V3)	39		10	9	16	4	3.36	0.986
	%		25	23	40	10		
The non-compliance reports provided by internal auditors are reliable and significant to my organization/sector. (V4)	39		6	13	17	3	3.44	0.852
	%		15	33	43	7.5		
Internal audit ensures the economical, effective and efficient use of resources in my office/sector.(V5)	37		1	18	14	4	3.57	0.728
	%		2.5	45	35	10		

VA ESLSE	Frequency						Mean	Std. Deviation
	N	SD	D	N	A	SA		
In my office/sector internal audit ensures activity performed is compliance with established policies, procedures, laws and regulations.(V6)	38		3	10	20	5	3.71	0.802
	%		7.5	25	50	13		
The recommendations of internal audit department provide practical, cost-benefit solutions for correcting the problems that were found. (V7)	39	2	2	12	19	4	3.54	0.942
	%	5	5	30	48	10		
The existing role that the internal audit is playing sufficiently to address the very purpose for which it is established (V8)	34		5	8	16	5	3.62	0.922
	%		13	20	40	13		
Internal auditors in your company are capable of carrying out internal control function under current corporate governance rules (V9)	40		2	11	24	3	3.7	0.687
	%		5	28	60	7.5		
The existence and findings (reports) of Internal Auditors meet my expectations. (V10)	38		1	14	16	7	3.76	0.786
	%		2.5	35	40	18		
The internal auditor reports are highly considered for decision making and internal controls by the management. (V11)	38		4	13	17	4	3.55	0.828
	%		10	33	43	10		

Source: SPSS output from survey data (June, 2018)

Table 4.6 shows the result of employee's perception about the ability of audit department to add a value to the organization in ESLSE. The response of the respondents for the statements/items has mean value greater than 3.36. The respondents have agreed positively on all items have a frequency greater than 40% that goes up to 60% except one item which is 35%. Only one item has a frequency of 5% strong disagreement.

As it is shown in the table 4.5 and 4.6 the mean value of ESLSE is greater in all items than EEU. The lowest mean score for ESLSE is on item three which is "The organization uses the recommendations, criticisms and information provided by internal auditor for decision making." whereas the lowest score for EEU is "Internal auditors in your company are capable of carrying out internal control function under current corporate governance rules". The highest score for ESLSE is on item "Internal auditors can effectively identify and report any noncompliance activities with my office's/sector's policies and procedures." and for EEU it is "The internal auditor reports are highly considered for decision making and internal controls by the management."

The lowest and the highest score provide informs; in case of EEU, despite the auditors weakness the management are willing to use the report as part of their decision. On the other hand, in case of ESLSE, the auditors are capable but the management are not willing.

#### ***4.2.2.2 Management support***

Table 4.7 below shows the result of employee's perception about the support provided by the management for audit department EEU. The response of the respondents for all statements/items has mean value greater than 3.11. The respondents have agreed positively on all items have a frequency greater than 37.5% up to 52%. The higher score for disagreement is 25%, whereas the neutral response has higher than the disagreement which is 30%.

**Table 0-7: Management support group items for EEU**

MS EEU	Frequency						Mean	Std. Deviation
	N	SD	D	N	A	SA		
Internal auditors receive full cooperation, access to records and information from the office/sector(V12)	40		10	7	21	2	3.38	0.925
	%		25	17.5	52.5	5		
Internal auditors can get the necessary resources (facilities) to perform auditing activities as needed. (V13)	40	3	3	12	16	6	3.48	1.086
	%	8	7.5	30	40	15		
Internal auditors are provided related trainings to improve their skill, to introduce with new technology, policy and procedure (V14)	38	1	7	7	19	4	3.47	1.006
	%	3	17.5	17.5	47.5	10		
Internal auditing practices are considered as a value adding activity and can work smoothly & regularly with the management. (V15)	38		7	12	15	4	3.42	0.919
	%		17.5	30	37.5	10		
The management often implement the recommendation of internal auditors. (V16)	39	1	7	11	18	2	3.33	0.927
	%	3	17.5	27.5	45	5		
The management uses the recommendations, criticisms and information provided by internal auditor for decision making.(V17)	37	3	7	11	15	1	3.11	1.022
	%	8	17.5	27.5	37.5	2.5		

Source: SPSS output from survey data (June, 2018)

**Table 0-8: Management support group items for ESLSE**

MS ESLSE	Frequency						Mean	Std. Deviation
	N	SD	D	N	A	SA		
Internal auditors receive full cooperation, access to records and information from the office/sector(V12)	40		5	13	19	3	3.5	0.816
	%		13	33	48	7.5		
Internal auditors can get the necessary resources (facilities) to perform auditing activities as needed. (V13)	39	1	4	7	22	5	3.67	0.927
	%	2.5	10	18	55	13		
Internal auditors are provided related trainings to improve their skill, to introduce with new technology, policy and procedure (V14)	38		4	8	21	5	3.71	0.835
	%		10	20	53	13		
Internal auditing practices are considered as a value adding activity and can work smoothly & regularly with the management. (V15)	38		3	14	16	5	3.61	0.823
	%		7.5	35	40	13		
The management often implement the recommendation of internal auditors. (V16)	36		4	16	14	2	3.39	0.766
	%		10	40	35	5		
The management uses the recommendations, criticisms and information provided by internal auditor for decision making.(V17)	38		8	12	13	5	3.39	0.974
	%		20	30	33	13		

Source: SPSS output from survey data (June, 2018)

Table 4.8 shows the result of employee’s perception about the support provided by the management for audit department ESLSE. The response of the respondents for all

statements/items has mean value greater than 3.39. The respondents have agreed positively on all items have a frequency greater than 33% up to 55%. The higher score for disagreement is 20%, whereas the neutral response has higher than the disagreement which is 40%.

As it is shown in the table 4.7 and 4.8 the mean value of ESLSE is greater in all items than EEU. The highest and lowest mean score for ESLSE is on item “Internal auditors are provided related trainings to improve their skill, to introduce with new technology, policy and procedure” and “The management often implement the recommendation of internal auditors” respectively. In case of EEU “Internal auditors can get the necessary resources (facilities) to perform auditing activities as needed.” and “The management uses the recommendations, criticisms and information provided by internal auditor for decision making.” have the highest and lowest value respectively.

The lowest and the highest score inform; in case of EEU, despite the auditor’s weakness the management are willing to use the report as part of their decision. On the other hand, in case of ESLSE, the management provide support for the improvement of auditors but does not use their recommendation as needed.

#### ***4.2.2.3 Organizational independence***

**Table 0-9: Organizational independence group items of EEU**

OI EEU	Frequency						Mean	Std. Deviation
	N	SD	D	N	A	SA		
Internal auditor plan its activity without the interference of the management (V18)	39	5	5	10	17	2	3.15	1.136
	%	13	12.5	25	42.5	5		
Internal auditor perform the auditing activities without any interference from anybody and without any influence (V19)	37	2	6	15	13	1	3.14	0.918
	%	5	15	37.5	32.5	2.5		
Internal auditor freely decide the scope, time and extent of auditing procedures based on auditing standards and the office's/sector's policy. (V20)	38	3	7	10	17	1	3.16	1.027
	%	8	17.5	25	42.5	2.5		
The internal auditors have confidence to issue audit report because they are free to determine the nature and frequency of noncompliance activities. (V21)	38	2	7	15	14		3.08	0.882
	%	5	17.5	37.5	35			
Internal auditor can freely include any audit finding and report directly to responsible body. (V22)	38	1	10	14	12	1	3.05	0.899
	%	3	25	35	30	2.5		
The organization supports Internal auditing staffs by budgeting funds to have relevant education in auditing that allows them to audit all of the organization's/sector's systems. (V23)	39	4	9	10	14	2	3.03	1.112
	%	10	22.5	25	35	5		

Source: SPSS output from survey data (June, 2018)

Table 4.9 above shows the result of employee's perception about the organizational independence of audit department in EEU. The response of the respondents for all statements/items has mean value that range from 3.03 to 3.16. The respondents have agreed positively on all items have a frequency greater than 30% up to 42.5%. The frequency of disagreement is ranges from 15% to 25% where one item have a frequency less than 15%, whereas the neutral response ranges from 25 to 37.5%.

Table 4.10 below shows the result of employee's perception about the organizational independence of audit department in ESLSE. The response of the respondents for all statements/items has mean value that range from 2.5 to 2.95. The respondents have agreed positively on all items have a frequency greater than 20% up to 38%. The frequency of neutrality ranges from 15% to 28% where one item have a frequency less than 10%, whereas the disagreement is from 25% to 35%.

**Table 0-10: Organizational independence group items for ESLSE**

OI ESLSE	Frequency						Mean	Std. Deviation
	N	SD	D	N	A	SA		
Internal auditor plan its activity without the interference of the management (V18)	38	5	10	11	9	3	2.87	1.166
	%	13	25	28	23	7.5		
Internal auditor perform the auditing activities without any interference from anybody and without any influence (V19)	39	5	10	10	13	1	2.87	1.105
	%	13	25	25	33	2.5		
Internal auditor freely decide the scope, time and extent of auditing procedures based on auditing standards and the office's/sector's policy. (V20)	39	5	15	10	8	1	2.62	1.042
	%	13	38	25	20	2.5		
The internal auditors have confidence to issue audit report because they are free to determine the nature and frequency of noncompliance activities. (V21)	39	7	14	7	11		2.56	1.095
	%	18	35	18	28			
Internal auditor can freely include any audit finding and report directly to responsible body. (V22)	39	3	14	6	14	2	2.95	1.123
	%	7.5	35	15	35	5		
The organization supports Internal auditing staffs by budgeting funds to have relevant education in auditing that allows them to audit all of the organization's/sector's systems. (V23)	38	9	14	3	11	1	2.5	1.225
	%	23	35	7.5	28	2.5		

Source: SPSS output from survey data (June, 2018)

As it is shown in the table 4.9 and 4.10, the mean value of EEU is greater in all items than ESLSE. The highest and lowest mean score for ESLSE is on item “Internal auditor can freely include any audit finding and report directly to responsible body.” and “Internal auditor freely decide the scope, time and extent of auditing procedures based on auditing standards and the office's/sector's policy.” respectively. In case of EEU “Internal auditor freely decide the scope, time and extent of auditing procedures based on auditing standards and the office's/sector's policy.” and “Internal auditor can freely include any audit finding and report directly to responsible body.” have the highest and lowest value respectively.

The result shows that the independency of audit in both organizations is weak as the mean value is lower than the other factors.

#### ***4.2.2.4 Experience and competence of Audit***

Table 4.11 shows the existence of experience and competency of audit staff in department in EEU. The response of the respondents for all statements/items has mean value that range from 2.83 to 3.08. The respondents have agreed positively on all items have a frequency greater than 30% up to 45%. The frequency of disagreement is ranges from 30% to 37.5%, whereas the neutral response is as high as 37.5%.

**Table 0-11: Experience and competency group items for EEU**

EC EEU	Frequency						Mean	Std. Deviation
	N	SD	D	N	A	SA		
The office/sector has skilled internal auditors. Most of them have certification in auditing. (V24)	39	3	14	4	16	2	3	1.147
	%	8	35	10	40	5		
It is possible to audit and review each activity on time, and cover the planned scope of auditing activities. (V25)	40	3	12	7	18		3	1.038
	%	8	30	17.5	45			
The experience of internal auditors is very good to be able to identify the non conformance activity (V26)	37	2	13	7	14	1	2.97	1.04
	%	5	32.5	17.5	35	2.5		
The work of internal audit is performed with modern technology that uses computerized data tools and specific IA software (V27)	39	2	15	5	14	3	3.03	1.135
	%	5	37.5	12.5	35	7.5		
The non-compliance reports provided by internal auditors are reliable and significant to the organization/sector. (V28)	38	5	12	7	12	2	2.84	1.175
	%	13	30	17.5	30	5		
Internal auditor have clearly defined audit plan for the year and over the long term (V29)	39	16	6	15	2		3.08	1.01
	%	40	15	37.5	5			
All audit activities are well planed and performed in organized manner(V30)	40	5	14	5	15	1	2.83	1.152
	%	13	35	12.5	37.5	2.5		

Source: SPSS output from survey data (June, 2018)

**Table 0-12: Experience and competency group items for ESLSE**

EC ESLSE	Frequency						Mean	Std. Deviation
	N	SD	D	N	A	SA		
The office/sector has skilled internal auditors. Most of them have certification in auditing. (V24)	39		1	13	22	3	3.69	0.655
	%		2.5	33	55	7.5		
It is possible to audit and review each activity on time, and cover the planned scope of auditing activities. (V25)	39	1	4	16	16	2	3.36	0.843
	%	2.5	10	40	40	5		
The experience of internal auditors is very good to be able to identify the non conformance activity (V26)	38	1	5	10	19	3	3.47	0.922
	%	2.5	13	25	48	7.5		
The work of internal audit is performed with modern technology that uses computerized data tools and specific IA software (V27)	36		8	6	18	4	3.5	0.971
	%		20	15	45	10		
The non-compliance reports provided by internal auditors are reliable and significant to the organization/sector. (V28)	38		6	13	18	1	3.37	0.786
	%		15	33	45	2.5		
Internal auditor have clearly defined audit plan for the year and over the long term (V29)	39		2	10	18	9	3.87	0.833
	%		5	25	45	23		
All audit activities are well planed and performed in organized manner(V30)	40		1	12	23	4	3.75	0.67
	%		2.5	30	58	10		

Source: SPSS output from survey data (June, 2018)

Table 4.12 shows the existence of experience and competency of audit staff in department in ESLSE. The response of the respondents for all statements/items has mean value that range from 3.37 to 3.87. The respondents have agreed positively on all items have a frequency greater than 40% up to 55%. The frequency of disagreement is lower in most of the items except two items which have 15% and 20%, whereas the neutral response ranges from 15% to 40%.

As it is shown in the table 4.11 and 4.12, the mean value of ESLSE is greater in all items than EEU. The highest and lowest mean score for ESLSE is on item “Internal auditor have clearly defined audit plan for the year and over the long term” and “It is possible to audit and review each activity on time, and cover the planned scope of auditing activities” respectively. In case of EEU “Internal auditor have clearly defined audit plan for the year and over the long term.” and “The non-compliance reports provided by internal auditors are reliable and significant to the organization/sector.” have the highest and lowest value respectively.

The result show that for the case of ESLSE, even though they are capable to plan the properly they could not deliver the report on time. For EEU, the report is not as reliable as expected to be.

#### ***4.2.2.5 Size of Internal Audit***

**Table 0-13: Size of internal audit group items for EEU**

SIA EEU	Frequency						Mean	Std. Deviation
	N	SD	D	N	A	SA		
The audit procedures and evidence collections are completed on time, since enough and skilled internal auditors are available or employed. (V31)	36		1	13	19	3	3.67	0.676
	%		2.5	33	48	7.5		
The internal audit staff number matches the scope of office's/sector's internal operations.(V32)	37		1	12	17	7	3.81	0.776
	%		2.5	30	43	18		
It is possible to plan auditing activity as many as possible to examine enough sectors per year in the company. (V33)	38	3	9	16	8	2	2.92	0.997
	%	7.5	23	40	20	5		

Source: SPSS output from survey data (June, 2018)

Table 4.13 shows the size of audit department in EEU. The response of the respondents for all statements/items has mean value that range from 2.92 to 3.81. The respondents have agreed positively on two items with 43% and 48% in the last item neutrality is higher than either positively agreed or negatively disagreed which is 40%, 20% and 23% respectively.

**Table 0-14: Size of internal audit item group for ESLSE**

SIA ESLSE	Frequency						Mean	Std. Deviation
	N	SD	D	N	A	SA		
The audit procedures and evidence collections are completed on time, since enough and skilled internal auditors are available or employed. (V31)	39	2	11	7	18	1	3.13	1.031
	%	5	27.5	17.5	45	2.5		
The internal audit staff number matches the scope of office's/sector's internal operations.(V32)	37	1	11	8	17		3.11	0.936
	%	3	27.5	20	42.5			
It is possible to plan auditing activity as many as possible to examine enough sectors per year in the company. (V33)	36	3	6	7	17	3	3.31	1.117
	%	8	15	17.5	42.5	7.5		

Source: SPSS output from survey data (June, 2018)

Table 4.14 shows the size of audit department in ESLSE. The response of the respondents for all statements/items has mean value that range from 3.11 to 3.31. The respondents have agreed positively on all items with 42.5% to 45%.

As it is shown in the table 4.13 and 4.14, the mean value of EEU is greater in two items than ESLSE. This is consistent with the other finding which is depicted figure 4.5 that auditors in ESLSE cannot complete the report as per the pan because the size is not adequate.

#### **4.2.2.6 Approved charter**

Table 4.15 shows the result of employee's perception about the availability of approved audit chart in EEU. The response of the respondents for all statements/items has mean value that range from 2.94 to 3.16. The respondents have agreed positively on all items have a

frequency greater than 32.5% up to 42.5%. The frequency of neutrality ranges from 15% to 22.5% where two items have a frequency less than 15%, whereas the disagreement is from 27.5% to 32.5%.

**Table 0-15: Approved charter group items for EEU**

AC EEU	Frequency						Mean	Std. Deviation
	N	SD	D	N	A	SA		
Internal audit charter is maintained (available) in all office /sector. (V34)	39	1	13	7	17	1	3.1	0.995
	%	3	32.5	17.5	42.5	2.5		
The purpose and authority of internal audit is clearly defined in charter. (V35)	39	2	12	7	16	2	3.1	1.071
	%	5	30	17.5	40	5		
The purpose and authority of internal audit charter is in line with “Standards for the Professional Practice” formulated by the Institute of Internal Auditors (V36)	37	3	13	6	13	2	2.95	1.129
	%	8	32.5	15	32.5	5		
Internal Auditor activities are formally specified in the charter(V37)	38	1	11	9	15	2	3.16	1.001
	%	3	27.5	22.5	37.5	5		
Internal auditor have formal follow up procedure to ensure whether correction actions are taken as per recommendations(V38)	36	2	11	5	17	1	3.11	1.063
	%	5	27.5	12.5	42.5	2.5		
Internal auditors are formally authorized access to records, personnel, and physical properties relevant to the performance of engagements, and the defined scope of IA activities. (V39)	36	3	12	5	16		2.94	1.068
	%	8	30	13	40			
Internal Auditors have a formal mechanism to get senior management attention to place escalation issue (V40)	37	2	11	8	15	1	3.05	1.026
	%	5	27.5	20	37.5	2.5		

Source: SPSS output from survey data (June, 2018)

**Table 0-16: Approved charter group items for ESLSE**

AC ESLSE	Frequency						Mean	Std. Deviation
	N	SD	D	N	A	SA		
Internal audit charter is maintained (available) in all office /sector. (V34)	39		4	18	16	1	3.36	0.707
	%		10	45	40	2.5		
The purpose and authority of internal audit is clearly defined in charter. (V35)	38		11	15	11	1	3.05	0.837
	%		28	38	28	2.5		
The purpose and authority of internal audit charter is in line with “Standards for the Professional Practice” formulated by the Institute of Internal Auditors (V36)	39	1	3	13	16	6	3.59	0.938
	%	2.5	7.5	33	40	15		
Internal Auditor activities are formally specified in the charter(V37)	38		2	10	22	4	3.74	0.724
	%		5	25	55	10		
Internal auditor have formal follow up procedure to ensure whether correction actions are taken as per recommendations(V38)	38	2	9	11	14	2	3.13	1.018
	%	5	23	28	35	5		
Internal auditors are formally authorized access to records, personnel, and physical properties relevant to the performance of engagements, and the defined scope of IA activities. (V39)	35		2	8	18	7	3.86	0.81
	%		5	20	45	18		
Internal Auditors have a formal mechanism to get senior management attention to place escalation issue (V40)	38		3	10	18	7	3.76	0.852
	%		7.5	25	45	18		

Source: SPSS output from survey data (June, 2018)

Table 4.16 shows the result of employee's perception about the availability of approved audit chart in ESLSE.. The response of the respondents for all statements/items has mean value that range from 3.05 to 3.86. The respondents have agreed positively on all items have a frequency greater than 28% up to 55%. The frequency of neutrality ranges from 20% to 40%, whereas except the two items disagreement is less than 10%.

As it is shown in the table 4.15 and 4.16, the mean value of ESLSE is greater in all items than EEU. The highest and lowest mean score for ESLSE is on item "Internal auditors are formally authorized access to records, personnel, and physical properties relevant to the performance of engagements, and the defined scope of IA activities." and "The purpose and authority of internal audit is clearly defined in charter" respectively. In case of EEU "Internal Auditor activities are formally specified in the charter." and "The purpose and authority of internal audit charter is in line with "Standards for the Professional Practice" formulated by the Institute of Internal Auditors." have the highest and lowest value respectively.

### **4.3 Regression analysis and hypotheses testing**

In this study multiple regressions was employed. The basic objective of using multiple regression equation on this study is to make the study more effective at describing, understanding and predicting the stated variables. That is, in this study it was primarily used to identify the major determinant factors of internal audit effectiveness. Here, the basic assumptions of normality, no autocorrelation, no multicollinearity are tested before the regression was run.

#### **4.3.1 Reliability and validity of data**

According to classical liner regression theory, a model is said to give economically intuitive result if it is free of serial correlation, multi linearity & normality problems. Based on this the researcher conducted a test of serial correlation, Multi linearity test & Normality Test.

#### 4.3.1.1 Reliability analysis

To measure the consistency of the questionnaire particularly the Likert-type scale the reliability analysis is essential in reflecting the overall reliability of constructs that it is measuring. To carry out the reliability analysis, Cronbach's Alpha ( $\alpha$ ) is the most common measure of scale reliability and a value greater than 0.700 is very acceptable (Cohen et al, 2010) and according to Cronbach's (1951), a reliability value ( $\alpha$ ) greater than 0.600 is also acceptable. The questioner item is analyzed by SPSS and the following result is obtained:

**Table 0-17 Cronbach's alpha for likert item**

<b>Reliability Statistics</b>		
Cronbach's Alpha		N of Items
EEU	ESLSE	
.609	.655	6
.649	.754	6
.900	.866	7
.736	.621	3
.622	.657	7
.870	.707	11

Source: SPSS output from survey data (June, 2018)

In above two tables, the value for Cronbach's Alpha ( $\alpha$ ) is seen for all variables. When these calculated reliability values are greater than 0.6000, and compared with the minimum value of alpha 0.600 advocated by Cronbach's (1951), then the responses generated for all of the variables' used in this research were reliable enough for data analysis.

**4.3.1.2 Serial correlation test/No autocorrelation**

Since the Durbin Watson Statistic (D.W) ranges from zero to four, and if it has a statistics value of two indicates there is no serial correlation to the model, if D.W less than two there is positive serial correlation and if D.W close to zero indicates perfect positive serial correlation. And if D.W greater than two, there is negative serial correlation and if it is close to four perfect negative serial correlation. That is a D.W value of 1.5 to 2.5 is desirable in any model to say it is free from serial correlation (Richard, 2015).

**Table 0-18 Model Summary Durbin-Watson value only (for EEU AND ESLSE)**

Model	Durbin-Watson	
	EEU	ESLSE
1	2.04	2
a. Predictors: (Constant), MS, OI, EC, SIA, AC b. Dependent Variable: VA		

Source: SPSS output from survey data (June, 2018)

According to table 4.18 above, both models of this study was free from serial correlation with the D.W value of 2.04 and 2.00 respectively, which is close to two. This indicates that the study models are free of serial correlation.

**4.3.1.3 Multi collinearity test**

Multi colinearity problem mainly occurs when the independent variables are highly interdependent one over the other. Multi colinearity most of the time may occurs in a model but it becomes an issue if it severe. Multi colinearity test mainly checked by a system called variance inflation factor (VIF). In this case, a model is said to suffering from Multi colinearity problem if the VIF is greater than 10 (Richard, 2015).

Based on this, since the models VIF is less than 10 as is it depicted on table 4.20 , it can conclude that there is no multicollinearity problem in both models.

**Table 0-19 Collinearity test for EEU and ESLSE**

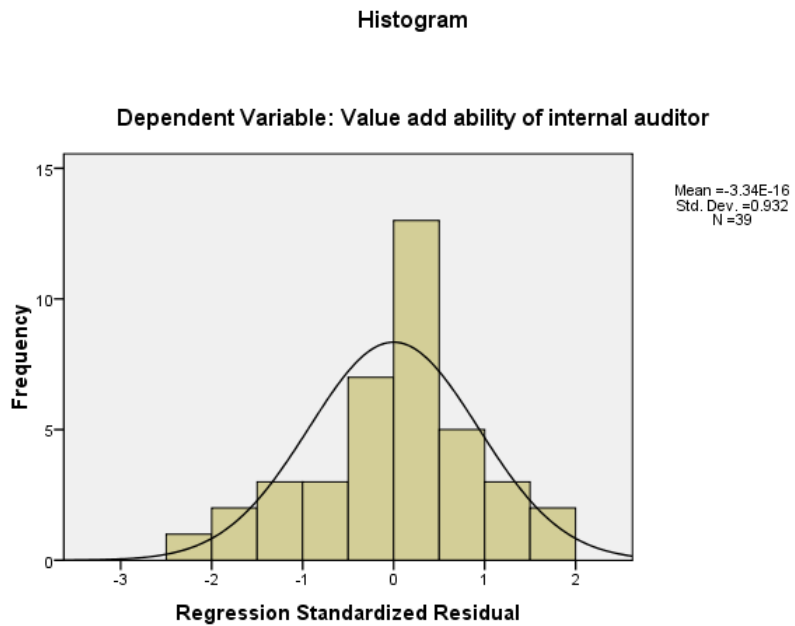
Model		Collinearity Statistics EEU		Collinearity Statistics ESLSE	
		Tolerance	VIF	Tolerance	VIF
1	(Constant)				
	MS	0.877	1.141	0.947	1.056
	OI	0.86	1.163	0.954	1.048
	EC	0.91	1.099	0.945	1.058
	SIA	0.599	1.669	0.89	1.123
	AC	0.616	1.624	0.885	1.13
a. Dependent Variable: VA					

Source: SPSS output from survey data (June, 2018)

#### 4.3.1.4 Normality test

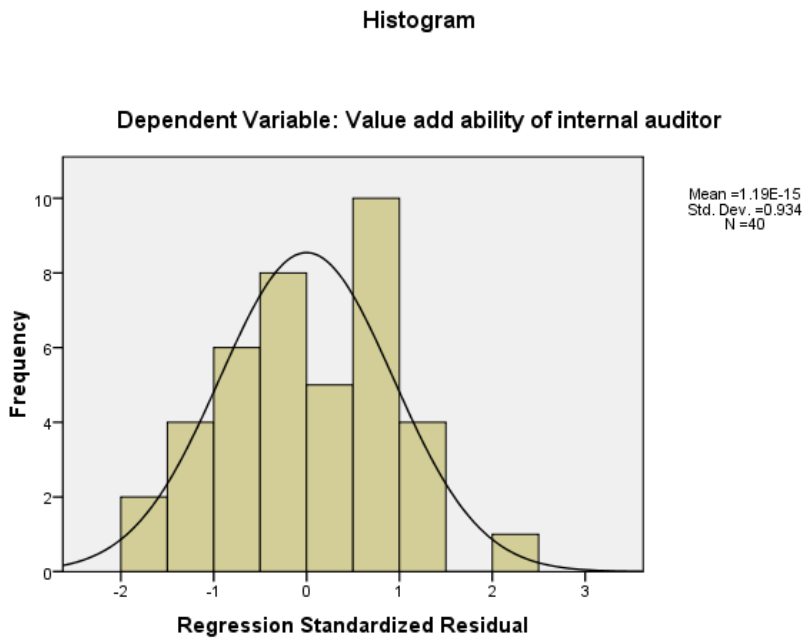
Normality test help to determine whether the data used is normal for the residuals, and therefore, that this assumption is met in the data for statistical tests. The approaches can rely on visual inspection or statistical tests. Graphical interpretation has the advantage of allowing good judgment to assess normality in situations when numerical tests might be over or under sensitive, but graphical methods do lack objectivity. If do not have great deal of experience to interpreting normality through graphically view, it is probably best to rely on the numerical methods.

When visualize the fit of the normal distribution, examine the probability plot and assess how closely the data points follow the fitted distribution line. Normal distributions tend to fall closely along the straight line. Skewed data form a curved line. As it can confirmed by visual inspection of the histogram of survey result from SPSS 20 (Figure 4.1 and 4.2), our residuals seem normally distributed which means the model is free of normality problem.



**Figure 0-1 Histogram with normal curve plotted (for EEU)**

Source: SPSS output from survey data (June, 2018)



**Figure 0-2 Histogram with normal curve plotted (for ESLSE)**

Source: SPSS output from survey data (June, 2018)

### 4.3.2 Multiple regression

The Multiple regression was used to assess and identify the determinant factors of internal audit effectiveness and to compare the performance of the audit activity between two Ethiopian public sector offices: Ethiopian shipping and logistic service enterprise (ESLSE) and Ethiopian electric utility (EEU). The independent factors are represented and explained by internal audit effectiveness (such as Management Support, Organizational independence, Experience and competency of Internal audit, Size of internal audit department and the approved internal audit charter) while the dependent variable which is performance of the audit activity is described by the Value add ability of Internal Auditor.

Two models for each company were used in order to see the significance of each factor as well as to make a comparison between the two companies: EEU and ESLSE. Multiple regressions were suitable for this study because it requires of the dependent (predicted) variable to be a continuous variable, with scores reasonably normally distributed (Pallant, 2001). The models contained five independent variables and one dependent variable.

Table 4.20 to 4.21 summarizes the percentage of variance in Value add ability of Internal Auditor variable to be explained by the independent variables, while table 4.22 and 4.23 presents the significance of these relationship.

**Table 0-20 Model Summary (for EEU)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.257 <sup>a</sup>	0.66	0.656	0.47535
a. Predictors: (Constant), MS, OI, EC, SIA, AC				
b. Dependent Variable: VA				

Source: SPSS output from survey data (June, 2018)

**Table 0-21 Model Summary (for ESLSE)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.290 <sup>a</sup>	0.84	0.835	0.32577
a. Predictors: (Constant), MS, OI, EC, SIA, AC				
b. Dependent Variable: VA				

Source: SPSS output from survey data (June, 2018)

The coefficient of determination which is the  $R^2$  value shows how much of the variance in the company performance is explained by the model (Pallant, 2001). Table 4.20 and 4.21 above showed that the model for EEU which includes the five internal audit variables, explains 66% of the variance in company performance while for ESLSE it is 84%. That is, performance of the audit activity is highly explained by the Management Support, Organizational independence, Experience and competency of internal audit, Size of internal audit department and the approved internal audit charter in both companies even if it is more in ESLSE relative to EEU. Also, the Durbin-Watson Value of 2.04 and 2.00 show the absence of autocorrelation problem in both models.

Table 4.22 and 4.23 below present the ANOVA result to examine the existence of statistical significant relation between performance of the audit activity and internal audit variables.

**Table 0-22 ANOVA<sup>b</sup> (for EEU)**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.527	5	.105	.466	.000 <sup>a</sup>
	Residual	7.457	35	.226		
	Total	7.983	40			
a. Predictors: (Constant), MS, OI, EC, SIA, AC						
b. Dependent Variable: VA						

Source: SPSS output from survey data (June, 2018)

**Table 0-23 ANOVA<sup>b</sup>(for ESLSE)**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.332	5	.066	.326	.000 <sup>a</sup>
	Residual	3.608	35	.106		
	Total	3.940	40			
a. Predictors: (Constant), MS, OI, EC, SIA, AC						
b. Dependent Variable: Value add ability of internal auditor						

Source: SPSS output from survey data (June, 2018)

Pallant (2001) explains that in order to examine the statistical significance of the result, ANOVA should be considered. The above tables 4.22 and 4.23 showed that there is a statistical significance relationship between performance of the audit activity and internal audit variables ( $p=.000$ ) for both companies. That is the models are good enough to relate the stated independent variables and the dependent variable as it can be seen from the p-value of fisher's exact test value which is less than 1%.

**Table 0-24 Regression Coefficients (for EEU)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.46	0.711		4.864	0
	MS	0.048	0.127	0.069	2.382	0.005
	OI	-0.139	0.173	-0.146	-0.805	0.427
	EC	-0.172	0.116	-0.17	-4.963	0.043
	SIA	0.111	0.118	0.204	2.941	0.054
	AC	-0.04	0.151	-0.058	-2.268	0.09
a. Dependent Variable: VA						

Source: SPSS output from survey data (June, 2018)

$VA = 3.460 + 0.048MS - 0.139OI - 0.172EC + 0.11SIA - 0.040AC$
--

Where:-

VA = Value add ability of Internal Auditor (Dependent variable of the study)

3.460 = constant or intercept

MS= Management Support (an independent Variable)

OI= Organizational independence (an independent Variable)

EC= Experience and competency of Internal audit (an independent Variable),

SIA = Size of internal audit department (an independent Variable)

AC = The approved internal audit charter (an independent Variable)

In the first model (For EEU) regression result and its associated equation shows that from all the independent variables, Management Support and Size of internal audit department are found positively and significantly affecting the dependent variable: Value add ability of Internal Auditor while Experience and competency of Internal audit, and the approved internal audit charter are found negatively and significantly affecting the dependent variable: Value add ability of Internal Auditor at the Ethiopian Electric Utility (EEU) .

From the unstandardized B column it can also be seen that Organizational independence is found to be the insignificant determinant of Value add ability of Internal Auditor (with t – value less than 2) in EEU.

Among all the included variables in the model, experience and competency of Internal audit (with -1.72 ) is found as the main determinant factor of Value add ability of Internal Auditor and hence performance of the audit activity at EEU followed by Size of internal audit department (with 0.111) .

**Table 0-25 Regression Coefficients (for ESLSE)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.006	0.92		3.266	0.002
	MS	0.182	0.107	0.161	3.955	0.034
	OI	0.044	0.073	0.101	0.603	0.551
	EC	0.09	0.16	-0.009	2.053	0.008
	SIA	-0.107	0.107	-0.173	2.997	0.032
	AC	0.149	0.159	0.164	5.94	0.035
a. Dependent Variable: VA						

Source: SPSS output from survey data (June, 2018)

$$VA = 3.006 + 0.182MS + 0.044OI - 0.090EC + 0.107SIA + 0.149AC$$

Where:-

VA = Value add ability of Internal Auditor (Dependent variable of the study)

3.006 = constant or intercept

MS= Management Support (an independent Variable)

OI= Organizational independence (an independent Variable)

EC= Experience and competency of Internal audit (an independent Variable),

SIA = Size of internal audit department (an independent Variable)

AC = The approved internal audit charter (an independent Variable)

In the second model (For ESLSE) regression result and its associated equation shows that from all the independent variables, Management Support, and the approved internal audit charter are found positively and significantly affecting the dependent variable: Value add ability of Internal Auditor while size of internal audit is found negatively and significantly affecting the dependent variable: Value add ability of Internal Auditor at the Ethiopian shipping and logistic service enterprise (ESLSE) .

From the unstandardized B column, it can also be seen that Organizational independence is again found to be the insignificant determinant of Value add ability of Internal Auditor (with t –value less than 2) in ESLSE.

Among all the included variables in the model, management support (with 0.182) is found as the main determinant factor of Value add ability of Internal Auditor and hence performance of the audit activity at ESLSE followed by approved internal audit charter (with 0.149).

### **4.3.3 Hypothesis testing**

From the model of EEU and ESLSE (Table 4.24 and 4.25), the p-value for the coefficient of the variables are less than 0.1 or /t/value is greater than or equal to 2 for all the independent variables except for organizational independence. So, we can reject the null hypothesis ( $H_0$ ) of those variables indicating the statistical significance of the independent variables in affecting the dependent variable.

This means, for both organizations management support, experience and competence, size of department and approved charter are significantly affect the value adding ability of the internal auditor. But, organizational independence does not affect.

## CHAPTER FIVE

### CONCLUSION AND RECOMMENDATION

#### 5.1 Conclusion

Due to important role it plays for the overall management system, internal audit is the major mechanism to combat corrupt and fraudulent acts. The existences of effective internal audit links with internal control risk management system, improves organizational efficiency and effectiveness, reduce information asymmetry during decision making, and ensures internal reliability of financial reporting process. By taking this aspect into consideration, this study explained factors that determine the IA effectiveness in the organizations and then analyzed the organizational dimensions in which these public sector offices carry out to enhance the IA effectiveness.

Accordingly both the value adding ability and its factors such as management support, independence, experience and competence, size of department and approved charter have lower mean score which is less than 4. This is visible in almost all analysis. Disagreement, neutrality and agreement on the issue concerning the audit are in a range of 25% to 42%. This shows the contribution of auditor in both organizations is not as influential as expected or it is simply average.

One of the key factors for the effectiveness of audit is management support. This is because of two main points which are providing any kind of support to strengthen audit and to use the recommendation and criticism of audit for decision making. On this respect, six statements were provided and the highest mean score is 3.71 for ESLSE and 3.16 for EEU. Which shows the commitment of the management is not excellent.

It is one of the requirement of IIA that audit department is to be organized independently. The way to prove its independency in the organization is existence of an independent body and being free from any management influence. In both ways both company fail to fulfill the requirement. The data collected have the same result with this. The organizational

independence of both organizations is even lower than the other factors which have a mean score of less than 3. The management may provide proper support for audit department but if the audit department is not organized independently its contribution and influence will be neutralized.

Considering the experience and competency of the audit, besides the proficiency of their expertise which can be improve by training, auditor activities in both organizations should be performed in organized manner. This is executed by having effective planning and communication. That is proved by having well planned activities, by producing reliable report, and by identifying significant non-conformance. In doing this the department improve its competency. According to the finding, ESLSE is better than EEU.

Comparing size and, experience and competency of the audit, ESLSE have better score in experience and competence than EEU. On the other hand, its score is lower in the size of audit department. But the value adding ability is still better. Therefore, even though the size of audit is important for better performance it is not as important as experience and competency of auditors. As argued by Zain et al. (2006), large size of audit has a benefit and opportunity to promote audit effectiveness but EEU does not exploit the advantage.

Internal audit charter is a document that clearly shows the purpose, authority, and responsibility of the internal audit activity. The presence of this document is important for the effectiveness of internal audit, but, according to the finding, the awareness and understanding of it in all sectors of both organizations is weak.

Based on the regression result it can be concluded that at EEU Management Support and Size of internal audit department positively and significantly affect Value add ability of Internal Auditor while Experience and competency of Internal audit, and the approved internal audit charter negatively and significantly affect it. However, the main determinant of performance of the audit activity at EEU is experience and competency of Internal audit while the insignificant determinant is Organizational independence.

At ESLSE, Management Support, and the approved internal audit charter are found positively and significantly affect Value add ability of Internal Auditor while size of internal

audit negatively and significantly affect it. But, the main determinant factors of Value add ability of Internal Auditor and hence performance of the audit activity at ESLSE is management support followed by experience and the approved internal audit while the insignificant factor is Organizational independence like the EEU case.

## **5.2 Recommendations**

Based on the research findings the researcher provides the following recommendations to the organizations of top management and audit department:

- The internal auditors of the organizations are recommended to maintain and improve their contribution for the EIA in their office, by using the supports from their offices management team appropriately, by improving their professional certification in line with the institute of internal audit standards and organizational guidelines and by introducing themselves with modern technologies that improve their IA function for their office.
- Currently, in both organizations the audit department is accountable to the management. It is the recommendation of the researcher; the organizations should form an audit committee which is accountable to the board of directors. This will increase the independence organization of the department.
- The commitment of the management should be improved as it is evaluated to be average. They should work more to improve the proficiency of the auditor by providing support like training. At the same time they have to use the recommendation and criticism of the audit in the decision making process.
- The audit department in both organizations has to work hard in performing their own task. So that they can improve on their planning, in providing reliable report in organized manner.
- EEU has to exploit the advantage of having large size of audit department. On the other hand ESLSE has to work on to have adequate staff.

- Training should be given to create awareness and common understanding of the importance of audit charter and its content so as to improve the audit effectiveness.
- Since experience and competency of Internal audit is found as the main determinant of performance of the audit activity, EEU should eliminate any barriers that hinder it and provide effective training so as to enhance the competency of the auditors.
- Since management support is found as the main determinant of performance of the audit activity, ESLSE should encourage the operation of the management staff in terms of such as enabling the internal auditors to get the necessary resources (facilities) to perform their auditing activities.
- According to the regression, the organizational independence is not significant factor for both organizations. At the same time the perception of the employees is that the audit department is not as independent as it is required. So further research is important to examine the effect of organizational independence in public enterprise.

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## APPENDICES

**Addis Ababa University  
School of Post Graduate Students  
Department of Accounting and Finance**

**Questionnaire Administered to Auditors, senior officers and managers**

*This questionnaire is designed to meet the objective of research project titled:*

***“PUBLIC ENTERPRISE INTERNAL AUDIT EFFECTIVENESS: COMPARATIVE STUDY OF SHIPPING AND LOGISTICS SERVICE ENTERPRISE AND ETHIOPIAN ELECTRIC UTILITY” for partial fulfillment of MSC in Accounting and Finance from Addis Ababa University.***

*Dear respondent, I would like to assure you that your response will only be used for the intended purpose and remains Confidential.*

**Thank you for your Cooperation**

Objective of the Questionnaire

Effective internal audit function is an important management tool to monitor and direct the internal operations of an organization effectively and appropriately. Therefore, the purpose of this research is to assess and identify factors that affect the effectiveness of internal audit which will be measured in terms of internal auditors' ability in identifying non-compliance activities and the added contribution by internal audit to the sector in two public business enterprises.

In line with this, you are kindly requested to give your response to your personal profile, and to each statement related with the internal auditors' ability in identifying non-compliance activities in your sector and the added contribution by internal audit to your sector as provided in the table below.

**A. The personal profiles**

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

1. Sex/Gender/: Male (\_\_\_\_) Female (\_\_\_\_)
2. Age (in year): 20 to 29(\_\_\_\_), 30 to 39(\_\_\_\_), 40 to 49(\_\_\_\_), 50 to 59(\_\_\_\_), above 60 (\_\_\_\_)
3. Your field of study: Accounting (\_\_\_\_), Management (\_\_\_\_), Economics (\_\_\_\_)  
Other specify\_\_\_\_\_
4. Level of education: TVET certificate (\_\_\_\_), Diploma (\_\_\_\_), Bachelor's Degree (\_\_\_\_),  
Masters Degree (\_\_\_\_) or others specify\_\_\_\_\_
5. Your years of experience \_\_\_\_\_
6. Current position in your office/sector\_\_\_\_\_
8. Does your organization/sector have audit committee? YES (\_\_\_\_), NO (\_\_\_\_)

**B. The questionnaire items (questions)**

The Questionnaire is prepared in Likert-scale form with five (5) point scales. I ask you to tick (√) or circle the appropriate scale (point) that indicates your opinion in table below.

The values of scales are: **5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly disagree**

No	Value add ability of Internal Auditor	5	4	3	2	1
1	Internal auditors can effectively identify and report any noncompliance activities with my office’s/sector's policies and procedures.					
2	Internal Auditors provide useful recommendations and constructive criticisms on non-compliances activities of the office/sector.					
3	I use the recommendations, criticisms and information provided by internal auditor for decision making.					

4	The non-compliance reports provided by internal auditors are reliable and significant to my organization/sector.					
5	Internal audit ensures the economical, effective and efficient use of resources in my office/sector.					
6	In my office/sector internal audit ensures activity performed is compliance with established policies, procedures, laws and regulations.					
7	The recommendations of internal audit department provide practical, cost-benefit solutions for correcting the problems that were found.					
8	The existing role that the internal audit is playing sufficiently to address the very purpose for which it is established					
9	Internal auditors in your company are capable of carrying out internal control function under current corporate governance rules					
10	The existence and findings (reports) of Internal Auditors meet my expectations.					
11	The internal auditor reports are highly considered for decision making and internal controls by the management.					
	<b>The Management Support</b>					
1	Internal auditors receive full cooperation, access to records and information from the office/sector					
2	Internal auditors can get the necessary resources (facilities) to perform auditing activities as needed.					
3	Internal auditors are provided related trainings to improve their skill, to introduce with new technology, policy and procedure					
4	Internal auditing practices are considered as a value adding activity and can work smoothly & regularly with the management.					
5	The management often implement the recommendation of					

	internal auditors					
6	The management uses the recommendations, criticisms and information provided by internal auditor for decision making.					
	<b>Organizational independence</b>					
1	Internal auditor plan its activity without the interference of the management					
2	Internal auditor perform the auditing activities without any interference from anybody and without any influence					
3	Internal auditor freely decide the scope, time and extent of auditing procedures based on auditing standards and the office's/sector's policy.					
4	The internal auditors have confidence to issue audit report because they are free to determine the nature and frequency of noncompliance activities.					
5	Internal auditor can freely include any audit finding and report directly to responsible body.					
6	The organization supports Internal auditing staffs by budgeting funds to have relevant education in auditing that allows them to audit all of the organization's/sector's systems.					
	<b>Experience and competency of Internal audit</b>					
1	The office/sector has skilled internal auditors. Most of them have certification in auditing.					
2	It is possible to audit and review each activity on time, and cover the planned scope of auditing activities.					
3	The experience of internal auditors is very good to be able to identify the non conformance activity					
4	The work of internal audit is performed with modern technology that uses computerized data tools and specific IA software					
5	The non-compliance reports provided by internal auditors are reliable and significant to the organization/sector.					

6	Internal auditor have clearly defined audit plan for the year and over the long term					
7	All audit activities are well planed and performed in organized manner					
<b>Size of internal audit department</b>						
1	The audit procedures and evidence collections are completed on time, since enough and skilled internal auditors are available or employed.					
2	The internal audit staff number matches the scope of office's/sector's internal operations.					
3	It is possible to plan auditing activity as many as possible to examine enough sectors per year in the company.					
<b>The approved internal audit charter</b>						
1	Internal audit charter is maintained (available) in all office /sector.					
2	The purpose and authority of internal audit is clearly defined in charter.					
3	The purpose and authority of internal audit charter is in line with "Standards for the Professional Practice" formulated by the Institute of Internal Auditors					
4	Internal Auditor activities are formally specified in the charter					
5	Internal auditor have formal follow up procedure to ensure whether correction actions are taken as per recommendations					
6	Internal auditors are formally authorized access to records, personnel, and physical properties relevant to the performance of engagements, and the defined scope of IA activities.					
7	Internal Auditors have a formal mechanism to get senior management attention to place escalation issue					