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**Assessment of Internal Control Effectiveness in Selected Ethiopian  
Public Universities**

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# **Assessment of Internal Control Effectiveness in Selected Ethiopian Public Universities**

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**Addis Ababa**

## Declaration

I, the undersigned, declare that this thesis is my original work and has not been presented for a degree in any other university, and that all source of materials used for the thesis have been duly acknowledged.

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## *Abstract*

*Internal control is the priority to detect assets misuse, ensuring efficiency of operations and adherence to rules and regulation. Governments need an assurance whether the internal control in their institutions is attaining these objectives. Audit reports of OFAG in recent years showed unfavorable audit findings on usage of budgets and compliance to rules and regulations in most public universities. Thus this study focused on assessment of the effectiveness of the internal control system in the universities to identify the possible areas of deficiencies in the system. The study used cross sectional survey through questionnaires to employees of the universities and semi structured interview with OFAG directors. Data were analyzed using descriptive statistics and inferential statistics using SPSS results. The result indicates that internal control in the universities is not effective. Particularly the risk assessment component of internal control is not practiced in the universities. Though monitoring is better in the universities, there is inadequate control environment, control activities and inadequate flow of information and communication in those universities.*

*Hence, it needs commitment from both universities management and responsible government authorities to improve those specific areas of deficiencies' in internal control indicated in the final chapter of this study.*

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### **List of Abbreviations**

AICPA	American Institute of Certified Public Accountants
APB	Auditing Practice Board
CA	Control Activities
CE	Control Environment
COSO	Committee of Sponsoring Organizations of the Tread way Commission
FDRE	Federal Democratic Republic of Ethiopia
GAO	General Accounting Office
HPR	House of Peoples Representatives
IC	Information and Communication
ICS	Internal Control System
MO	Monitoring
MOE	Ministry Of Education
MOFED	Ministry Of Finance and Economic Development
OFAG	Office of Federal Audit General
RA	Risk Assessment
SAS	Statement on Auditing Standards
SEC	Security and Exchange Commission
SOX	Sarbanes Oxley
UKAPC	United Kingdom Auditing Practices Committee
VFM	Value for Money

# CHAPTER ONE

## 1.1. Introduction

According to Committee of Sponsoring Organizations of the Tread way Commission (COSO, 1992) internal control is a major part of managing an organization. It comprises the plans, methods, and procedures used to meet missions, goals, and objectives, in doing so, supports performance-based management. Though the functions of internal control makes it wider American Institute of Certified Public Accountants(AICPA), General Accounting Office(GAO) and other sources, broadly define internal accounting control as a series of procedures and practices designed to promote and protect sound management practices, both general and financial. Thus an effective internal control procedures will significantly increase the likelihood that: financial information is reliable, so that managers and the board can depend on accurate information, assets and records of the organization are not stolen, misused, or accidentally destroyed, the organizations policies and government regulations are met, overall organization objective is achieved.

The review and evaluation of internal control systems is always a major task to government, management and auditors due to the professional, legal, and economic concerns. For example second standard of field work in Generally Accepted Auditing Standards, Statement of Auditing Standard (SAS) No.1 and SAS No. 55 requires the auditor to evaluate the client's internal control by stipulating that "There is to be a proper study and evaluation of the existing internal control as a basis for reliance thereon and for the determination of the resultant extent of the tests to which auditing procedures are to be restricted".

Internal control serves as the first line of defense in safeguarding assets and preventing and detecting errors and fraud. Bologna & Lindquist (1995) stressed that sufficient internal control is critical for the prevention of economic losses resulting from embezzlement and fraud.

They indicated little availability of data, on the amount of these losses; the estimated figure for white-collar crime in general is at between \$4 billion and \$40 billion by the United States authorities. It is also found that the seriousness and frequency of occurrence of employee theft, fraud, and embezzlement was ranked No.2 out of the 25 most commonly committed white-collar crimes. Therefore, being able to evaluate the effectiveness of the internal accounting control system is essential for the management to fulfill their duty as custodians of the entrusting parties.

In Ethiopia context, Office of Federal Audit General (OFAG) report to the parliament that in the last two years, Ethiopian Universities and other institutions failed to use budget properly and prepare untimely reports (the OFAG Reports, 2004, 2005). The recent corruption cases held by federal corruption commission and courts may also indicate failure of internal control practiced in those organizations. Hence it is necessary to review internal control of some organizations and the paper tries to evaluate effectiveness of internal control within Ethiopian Universities. In general this chapter is used to address the cause for the study or the problem and the objective to be achieved as a result of this work. The other components of this chapter are structured as; Overview of Ethiopian Higher Education Institutions( Section 1.2) Statement of the Problem ( Section 1.3), Objectives of the Study( Section 1.4), Significance of the Study( Section 1.5), Research Method Adopted( Section 1.6), Scope And Limitations of the Study( Section 1.7) And Structure of the Study( Section 1.8).

## **1.2. Overview of Ethiopian Higher Educational Institutions**

Higher Education Proclamation No. 650/2009 of FDRE described higher education institution as a public or private institution providing education in the arts and sciences offered to undergraduates and graduate students who attend degree programs through any of the delivery modes. Public higher educational institutions are those institutions whose budget is allocated by the Federal or State Government. The major objectives of the higher institutions are to: prepare knowledgeable, skilled, and attitudinally mature graduates in numbers with demand-based proportional balance of fields and disciplines so that the country shall become internationally competitive; promote research and technology transfer consistent with the country's priority needs to alleviate poverty. In recent years, the government expanding the public Universities intensively to attain afro mentioned objectives. To achieve this objective the government needs to assure that the resources allocated for this purpose is properly utilized for appropriate program. The method to ascertain this requirement is maintaining an effective internal control that is used to ensure efficiency of operating activities, safeguarding asset and adhere to the country rules and other regulations. This study is thus aimed to assess how effective the internal control systems are in these higher education institutions are; particularly the public Universities.

### **1.3. Statement of the Problem**

According to GAO Internal control should be designed to provide reasonable assurance regarding prevention of or prompt detection of unauthorized acquisition, use, or disposition of an agency's assets. Alam (1995), state that the cause for corruptions and misuse of resources is mainly failure of internal control and people ability to malfunction the channel of internal control by collusion.

Within existing Ethiopian government development goals and transformation plan, executives frequently warn that corruption and rent seeking is one of the threats for this plan and its implementation. For example, the OFAG report to parliament of FDRE government for the budget year 2004/2005 and previous budget years uncovered several weaknesses of internal control maintained and executed by government agencies and Universities, particularly on internal control related to use of budget and authorization of asset acquisitions. During 2003/2004 Ethiopian budget year the report revealed only 44% of audited public Universities and other government institutions were provided unqualified audit report, while 35% were provided similar audit opinion during 2004/2005(OFAG Audit report,2005). The report finally asserts that it is a threat for the government to meet its set development goals and objectives.

Based on this fact, the purpose of this study is to assess effectiveness of internal control of public Universities in Ethiopia.

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

The main purpose of this study is to assess the effectiveness of internal control practiced in Ethiopian Universities.

Based on the this objective, the following are the specific research questions answered by the study

***RQ1:** Can the effectiveness of Control Environment be ascertained in the Universities?*

***RQ2:** Are the Control Activities effective in the Universities?*

***RQ3:** Is the Risk Assessment adequately practiced in the Universities?*

***RQ4:** Is there adequate Information and Communication component of internal control system in the Universities?*

***RQ5:** Is there effective Monitoring of internal control system in the Universities?*

***RQ6:** Is the internal control system of the Universities achieving Value for Money?*

***RQ7:** Where is/are areas of deficiencies in Internal Control System of the Universities?*

### **1.5. Significance of the Study**

The fundamental of this study is, to aware management of Universities how strengthening internal control will be used in detecting (at least minimizing) the misuse, theft of resources and in attaining institutional objectives. By a mere definition, internal control is the way to an end which its failure can cause failure to meet objectives regardless of how smart the objective is and how huge the resource is allocated. Thus knowing the areas of deficiencies will enable the government to remove the loopholes for threatening corruption and rent seeking aggravated by failure of internal controls. In generic term, institutions use to establish highly effective, controllable and auditable internal control as preventive mechanism of exploited resources and meet objectives.

Lastly the paper adds a little proficiency to me as researcher in understanding how practically those institutions design and operate their internal control.

### **1.6. Research Method Adopted**

To achieve the best possible outcome of the study, a mixed research approach was used. The quantitative method of assessing internal control used structured questionnaire prepared on general frame work of internal control presented in the literature section of this study. An ultimate goal of this approach is to gather highly relevant and reliable information and draw representative measure on the operation of internal control elements and their standard sub components. The qualitative approach used unstructured interview with auditors at OFAG principally responsible and informative of the institutions under this study. This approach was used to explore exceptional and repeated areas of deficiency in internal control of the institutions.

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

Internal control in general scope goes from its design to operation and control in which several components are required to make it effective. Internal control can be affected by policy at national level, to competence and commitment of employees in each organization. Though, it will be important to include all these areas because of infeasibility from resource and time perspectives, the focus of this study was only assessment of the effectiveness of the internal control in the sample Universities. The study used five government Universities of existing 33 Universities because of infeasibility to reach all University in the country.

This study has no intent of reporting any theft or defalcation of assets made by individual employees or groups in the Universities.

The expected threat of the study was related to inherent limitation of internal control that, it is operated and controlled by people who are natural to errors and deliberate collusion. People hardly express failure of the internal caused by them because of various fear factors. The most possible methodologies of study were used to avoid this problem, but the researcher only express a reasonable assurance on the reliability and objectivity of data collected from the institutions questioned.

### **1.8. Structure of the study**

This study is organized in to five chapters. The first chapter presents the introduction. The second chapter shows the literature review while the third chapter contains brief description of the research design. The fourth chapter presents and analyzes the results. Finally, the chapter five presents the conclusions and recommendation of the study.

## **CHAPTER TWO**

### **LITERATURE RIVIEW**

This chapter reviews both the theories and empirical studies on effectiveness of internal control. The chapter is organized as theoretical review (section 2.1), empirical review (section 2.2) and conclusion (section 2.3). The theoretical section discusses overview of internal control, types of internal control, elements of internal control, limitations of internal control and value for money. The empirical section reviews various studies in the areas of internal controls. The conclusion section pinpoint main findings from the literatures there to indicate the knowledge gap existing in the area of internal control.

#### **2.1. Theoretical Review**

Statement of accounting standard(SAS, No 55) define internal control as a combined plan ,method and procedures used to safeguard asset, promote efficiency of operation and adherence to prescribed policies and directives. The wider definition of internal control by United Kingdom Auditing practice Committee (UKAPC,1979) defined internal control as the whole system of control, financial and operational in order to carry on business of any enterprise to safe guard asset, ensure the completeness, accuracy of records , detect errors and fraud and ensure timely report of financial information.

Robertson and Davis (1988) defined internal control from accounting perspective, accordingly internal control is a set of client procedure both computerized and manual imposed on accounting system for purpose of detecting errors and irregularities that may enter the system and affect the financial statements.

Large number of studies made on internal control however used an internal control definition made by Committee of Sponsoring Organizations (COSO, 1992) and Auditing Practices Board (APB, 1999). The two sources define internal control as a process, effected by an entity's board of directors (Council), management and other personnel, designed to provide reasonable assurance regarding the achievement of organizations objectives in the effectiveness and efficiency of operations, reliability of financial and management reporting, compliance with applicable laws and regulations and protect the organization's reputation .

Regardless of the sources, all have the point of coincidence related to the definition of internal control. These points are referred to as the purpose or functions of internal control. Accordingly internal control is designed and operated to; safe guard asset, adherence to policies and directive, and promoting organizational efficiency to attain the desired objectives.

In regard to purpose of internal control Walter and William (1982) conclude the role of internal control is; financial control perspective and administrative control. Financial control referred to as control to protect asset against improper disbursement and ensure the accuracy and reliability of financial records. Administrative control is used to ensure attainment of organizational objectives, ensuring efficiency and effectiveness of operation procedures.

This classification of role of internal control is in line with Statement of Accounting Standard (SAS) which classified internal control as accounting role and administrative role. Accounting role is a plan and coordination to safeguard asset and ensure reliability of financial records, while administrative control is a plan and coordination used to provide assurance of an adherence to management policies and directives.

In conjunction to afro mentioned definitions and purpose of internal control it is noteworthy to know who is responsible of internal control.

Meisser (2003) note that internal control is affected by board of directors and management, indicate that they are responsible about the internal control established in organization.

An Act of Sarbanes Oxley (2002) and statement of Audit Standard make the management accountable for internal control established in the organization. Among its provisions, SOX Section 302 required the corporate CEO and CFO in public filings to acknowledge their responsibility for establishing and maintaining internal controls and to report on the current operational effectiveness of the corporation's internal control system. The definition of internal control by Ethiopian Ministry Of Finance and Economic Development (MOFED, 1997) indicate that internal control is adopted by the Head of the public body to assist in achieving its objective.

The mandate of managers on the established internal controls makes the management to provide reasonable assurance on the effectiveness of the controls. Reasonable assurance of internal controls is defined by Bradford (1997) as assurance equates to a satisfactory level of confidence on the controls under given considerations of costs, benefits, and risks, though how much assurance is reasonable is a matter of judgment. Bradford explained the reasonable assurance is the result for deficiencies of internal control. These deficiencies are referred to as limitations of internal control which will be discussed later in this section.

The next sections of the theoretical review will therefore discuss types of internal control (section 2.1.1), elements of internal control (section 2.1.2), effective internal control (section 2.1.3), limitation of internal control (section 2.1.4), and value for money (section 2.1.5).

### 2.1.1. Types Of Internal Control

Different sources classify internal control based on areas of operating the internal control.

United Kingdom Auditing practice Committee (UKAPC, 1979) recognizes two types of internal controls; Accounting control and operational control.

Accounting control is concerned with the plan of the organization and all the co-ordinated methods and procedures which are implemented with a view of safeguarding assets and enhancing reliability of financial records.

An operational control comprises of the plan of the organization and all co-ordinates methods and procedures that are concerned with operatically efficiency an adherence to management policies and directives

In line with UKAPC, internal accounting control is defined in SAS No. 1 (paragraph 320. 28) as: a plan of organization and the procedures and records that are concerned with the safeguarding of assets and the reliability of financial records and consequently are designed to provide reasonable assurance about the transactions and related resources.

According to SAS (No 48) operational control is Administrative control which is the plan of organization and the procedures and records that are concerned with the decision processes leading to management's authorization of transactions. Such authorization is the management function directly associated with the responsibility for achieving the objectives of the organization and is the starting point for establishing accounting control of transactions.

The guideline of internal control, International Federation of Accountants (IFAC, 2012) put forward eight (8) types of internal control system that should be obtainable in an organization in an organization and they are follows:

- **Organizational Control and Segregation Of Duties**

An organization should have a plan of its activities which should define and allocate responsibilities that is every function should be monitored by a specific person who may be called “responsible officer.”

This reduces the risk of internal manipulation, accidental error and increases the element of checking. Functions which should be separated in an organization financial management include: initiation (officer or person who decides to give out the loan), Execution (the person who keeps the money to be loan out) and recording (the person who records the whole process in the book).system development and daily operations have to be considered in molding the internal control system to be full proof against fraud.

- **Physical Control , Arithmetical And Accounting Control**

The physical custody of assets and involves procedures and security measures designed to limit access to authorized personnel only. These include both direct and indirect access via documentations. These controls assume importance in the case of valuable, portable, exchangeable or desirable assets.” Physical control can also be achieved by electronic means in a computerized environment for example through the use of electronic I.D cards, password etc to restrict access to particular file.

Arithmetic and accounting control are the controls within the recording function which h checks that the transactions to be recorded and processed have been authorized and that they are correctly and accurately processed. Such controls include checking the arithmetical accuracy of the records, maintenance and checking of totals, reconciliation, control accounts and trial balances and accounting for document.

- **Personnel Control And Supervision Control**

There should be procedure to ensure that personnel have capabilities commensurate with their responsibility. Inevitably, the proper functioning of any stem depends on the competence and integrity of those operating it. The qualifications, selection and training as well as the personal characteristics of the personnel involved are important features to be considered in setting up any control system especially in financial management.

Any system of internal control should include the supervision by responsible officials of day-to – day transactions and the recording thereof. All activities performed in the financial management by all the level of staff should be clearly laid down and communicated to the person supervising

- **Management , Authorization And Approval**

These are the controls exercised by management outside the day-to-day routing of the system they include the overall supervisory controls exercised by management, the review of management accounts and comparison thereof with budget internal audit function and other special review procedures. It is also the duty of the management to review the internal control from time to time in order to accommodate changes in the financial management operations.

All transactions should require authorization by an appropriate responsible person.

This is very important in the financial system of an organization where large amount of money is handled so therefore it is appropriate for these money which are used for are used for various transactions to be authorized.

An auditing hand book by Spencer (2003) classified principal internal control as; administrative control, informational control, managerial control, procedural control and physical control.

In addition the hand book also classified internal control as; directive control, preventive control, detective control, and corrective control.

*Directive control*; is used to ensure a clear direction and derive to achieve desired objectives. It is related with motivating the people and gives them a clear sense. It may include staff training and awareness.

*Preventive control*; is to ensure that system works in the first place. This may include employing competent staff, high moral standard, segregation of duties, generally establishing good control environment.

*Detective control*; is used to pick up transactions errors that have not been prevented. They cover controls like supervisory review, internal checks, spot checks and reconciliations.

*Corrective control*; is final category of the controls used to ensure where the problem is identified and they are properly dealt with. These include management action, corrections and follow up.

### **2.1.2. Elements of Internal Control**

The components of internal control are no different in many sources. Some sources refer them the elements or frameworks while some other refer it standards of internal control. The Committee of Sponsoring Organizations (COSO,1994), Act of Sarbanes Oxley, American Institute of Certified Public Accountants (AICPA) and General Accounting Office (GAO) claim effective internal control should primarily have five elements namely; control environment, control activities, risk assessment, information and communication, and monitoring. Each of the elements will be discussed as follows.

#### **2.1.2.1. Control Environment.**

The control environment is considered as the tone at the top of an organization, influencing the control consciousness of its employees. Beneish et al (2008), defines the control environment as the tone of an organization and the way it operates.

He further says that it concerns the establishment of an atmosphere in which people can conduct their activities and carry out their control responsibilities effectively. The control environment is the foundational context within which the other aspects of internal control operate (Konrath, 1999). The philosophy and management style, organizational structure, methods of imposing control, assignment of authority and responsibility are all key aspects of the control environment (Jones, 2007). Likewise, COSO (2004) looks at the ethical environment of an organization to encompass aspects of upper management's tone in achieving organizational objectives, their value judgments and management styles. COSO argue this component is the foundation for all other components of internal control, providing both discipline and structure to the organization. Ethical business practices, management philosophy and a sense of business integrity all play key parts in the control environment component.

The control environment represents the control atmosphere for the entity and is the foundation for the other components (Nicolaisen, 2004). Bates (2001) considers the factors relating to the control environment to include the integrity, ethical values, and competence of employees and management, management's philosophy and operating style, the manner in which authority and responsibility are assigned, the organization and development of employees, and the attention and direction of the board of directors towards organizational success. Lou (2008) concurs that higher level administrators of an organization are responsible for establishing the appropriate control environment. Guy et al (1999) states that good control environment should provide guidelines related to: ethic and integrity values that should be owned by the member of entity; commitment to competence; participation or the board of director and audit committee; philosophy and management style; job description of each personnel; and lastly policy and procedure of human resources.

#### **2.1.2.2. Risk assessment**

Community Associations Institute (CAI, 2003) described risk assessment as identification of potential misstatements and designing controls to prevent or promptly detect of misstatements. Risk assessment is the process used by an organization (management) to decide how it will deal with the risks that pose a threat to achieving its objectives (Furrugia 2002). According to Meisser, (2003) risk assessment is the component related to the identification of risk, analysis of risk and management of risk. According to Meisser Risks are assessed through management's awareness of the environment in which it operates and its direct involvement with the day to day operations of the client community association. Risk assessment entails to identification and prioritization of objectives, the identification of risks and assessment of their likelihood and impact, Jones (2007).

Consequently Jones looks at risk assessment as the identification, evaluation and management of risks. He further notes that risks can relate, to financial statement fraud or to the misappropriation of assets.

#### **2.1.2.3. Control activity.**

Under Act of Sarbanes Oxley act (SOX, 2002) Control activities are the policies and procedures that assist in ensuring that management directives are successfully implemented. They provide the means to address the various risks that may hinder the achievement of the organization's objectives. In essence, control activities are established in response to perceived risks. Junner, (1993) described Control activities as policies and procedures that help ensure that management directives are carried out. They help ensure that necessary activities are taken to address risks to achievements of the entity's objectives. Control activities occur throughout the organization at all levels and all functions.

Control activities include range of activities; authorization, verifications, reconciliations, reviews of operating performance security of assets and segregation of duties (Ernst and Yong, 1995).

The American Institute of Certified Public Accountants, in Statement on Auditing Standards number 55 (SAS 55), also defined control activity as policy and procedure to ensure that every activity taken based on the consideration to minimize the risk faced by the entity. Accordingly the statement described the elements of control activities as

- Proper authorization of transactions
- Design and use of adequate documents and records to help ensure the proper recording of transactions and events
- Purchase orders to ensure that you received what you ordered and you only pay for what you received.
- Independent checks on performance and proper valuation of recorded amounts

A good entity should separate transaction authorization function, accounting record function, and asset store function (Guy et al., 1999; Meisser, 2003).Accordingly it is necessary to prevent the occurrence of cheating. The independency of each function can also be used to minimize the cheating behavior of the person in charge.

#### **2.1.2.4. Information and communication;**

In a good organization, information system is essential to guide its operation process. Information systems produce reports, containing operational financial and compliance – related information that makes it possible to run and control an organization (COSO, 1992). It should consist of accounting information system to ensure that the accounting process is valid and reliable.

The Standards for Internal Control (GAO, 1999) requires that Information should be recorded and communicated to management and others within the entity who need it and in a form and within a time frame that enables them to carry out their internal control and other responsibilities. Effective communications should occur in a broad sense with information flowing down, across, and up the organization. Information flow is essential to effecting control, information about an organization's plan, control environment, risks, control activities and performance must be communicated up, and access an organization (Ruttrman Working Group, 1994). Reliable and relevant information flow both internal and external sources must be identified, captured, processed and communicated to the people who need it in a form and time frame that is useful (Chambers 1995).

Management should ensure there are adequate means of communicating with, and obtaining information from, external stakeholders that may have a significant impact on the agency achieving its goals (Guy et al., 1999). According to (Guy et al., 1999), effective information technology management is critical to achieving useful, reliable, and continuous recording and communication of information. Moreover, the system should be communicated to everyone in the organization.

#### **2.1.2.5. Monitoring;**

Spencer (2003) used quote "hundreds killed by doctors relying on outdated manuals" from New Times (1997) to elaborate how necessary to update an internal control is within organizations.

According to Spencer (2003) to ensure the reasonable assurance regarding achievement of the organizations objectives, the monitoring process should be performed to evaluate and assess the systems of internal control to ensure that the procedures are consistently applied over an extended period of time.

Spencer believes internal audit is part of monitoring internal control system. Managers should promptly evaluate findings from audits and other reviews, including those showing deficiencies and recommendations reported by auditors and others who evaluate agencies' operations, to determine proper actions in response to findings and recommendations from audits and reviews. Jones (2008) refers monitoring as the process of assessing the quality of a system's performance over time. On an on-going basis, staff should evaluate the various systems of internal control and updates/modifies/enhances where needed. Any discovered deficiencies are addressed immediately and added to the overall systems of internal control. Monitoring of internal control should include policies and procedures for ensuring that the findings of audits and other reviews are promptly resolved. According to Coffin (2003) monitoring entails the activities and procedures designed to assess the effectiveness of the internal control system in achieving the entity's financial reporting objectives.

Monitoring activities may be ongoing or may be separate evaluations and it is important given the complex and dynamic environments faced by most organizations (Henle 2005). It seeks to ensure that systems are performing as intended. However, this is accomplished through ongoing monitoring activities, periodic evaluations or a combination of the two (COSO, 2004). Henle(2005) further contends that these activities permeate the entire organization, at all levels and in all functions.

### **2.1.3. Effective Internal Control System**

COSO (1992) provided criteria's against which effectiveness of internal controls can be assessed. Internal control can be judged effective if the entity's operations objectives are being achieved; published financial statements are being prepared, reliable and applicable laws and regulations are being complied with.

While internal control is a process, its effectiveness is a state or condition of the process at a point of time. Accordingly, the effective functioning of components of internal control provides a reasonable assurance regarding achievement of one or more of the stated categories of objectives to ensure high levels of organizational performance. Thus the company's criteria for effective internal control and success of the entire organization

Efficiency and effectiveness of operations have been taken to mean efficiencies and effective use of its resources including personnel, accurate information for decision making and safeguarding of assets and records (Aren and Lwebbecke, 1994).

As stated in internal control frame work of COSO (1994) an effective internal control should in priority encompass the five elements the control. In addition effective, internal controls must satisfy three basic criteria:-

- They must be appropriate (that is, the right control in the right place and commensurate to the risk involved).
- They must function consistently as planned throughout the period (that is, be complied with carefully by all employees involved and not bypassed when key personnel are away or the workload is heavy).
- They must be cost effective (that is, the cost of implementing the control should not exceed the benefit)

Basel Committee on Banking supervision (1998) states that in order an internal control effective there should be an effective and comprehensive internal audit carried out operationally independent ,appropriately trained and competent staff. It is part of monitoring of internal control system. In addition Basel Committee on banking supervision (1998) also suggested the following principles as a judgment to effective internal control.

**Principle 1-3;** States that in effective internal control; the board of directors and senior management of the companies should have a responsibility to develop policies, strategies, and understanding possible risks. They are also responsible for promoting high ethical standards, integrity standards and establishing the culture within the organizations.

**Principle 4;** An effective internal control requires that the material risks that affect adversely achievement of organizational goal continuously recognized and assessed.

**Principle 5;** Control activities should be integral part daily activities of an entity. An effective internal control requires appropriate control structure set up at every organizational level.

**Principle 6;** Effective internal control requires segregation of duties that personnel's are not assigned to conflicting responsibilities. Areas of potential conflicts should be identified and minimized.

**Principle 7;** Effective internal control requires adequate and comprehensive financial, operational and compliance data and external information used for decision making. The information should be reliable, timely and accessible.

**Principle 10;** Overall effectiveness of internal control should be monitored ongoing basis. There should be continuous evaluation of internal control.

Other studies also discovered; what are the judgments for effective internal control. Wells (2001) recognizes that internal controls can enhance the productivity and competitiveness of organizations. Effective internal control can help companies achieve established financial goals, prevent loss of resources, keep accurate recording of transactions, and prepare reliable financial statements (Ernst & Young 2002).

Apart from different measurements of internal control some argue internal control effectiveness is more dependent on one or more of the elements.

For example Spencer (2003) argue that to judge internal control effective depends on the criteria's established by management to evaluate the effectiveness. However internal control effectiveness is much dependent on control environment. Spencer (2003) confirms that if an organization gets the control environment right the rest will tend to follow. In evaluating the effectiveness of the internal control environments, Coopers and Lybraud (2006) argued that there is a need to consider whether control objectives are met; management conveys the message that integrity and ethical cannot be compromised, the organization structure provides a moral framework for planning, directing, and controlling operations, management ensures that appropriate responsibility and delegation of authority is assigned to deal with goals and objectives and the Board of Directors and audit committee are sufficiently independent from management to construct a challenge to management decision and take an active role in ensuring that an appropriate "tone at the top exists".

Turnbull report (2004) indicates risk assessment is an integral part of effective internal control. In order to fulfill organizational objective effective internal control should assess and minimize risks.

#### **2.1.4. Limitations of Internal Control Systems**

Deficiency of internal control is not arguable because if people are involved in every part of internal control. However well designed, internal control systems are still vulnerable. Thus the presence of internal controls is no guarantee that their objectives will be fulfilled. The following are the summarized areas of internal control limitations based on (COSO, 1992, SOX 2002.)

- Abuse of authorization responsibilities
- Collusion between two or more members of staff negating the segregation of duties
- Collusion with interests outside the entity like suppliers

- Fraud and systems which present obvious opportunities for abuse
- Failure of top management to act decisively on breaches of internal control systems
- Destruction of evidence by those responsible for abuses

A number of deficiencies indicate poor or inadequate internal control procedures or policies. According to Bradford (1997) the deficiencies can be categorized into three groups: deficiencies in the design of the internal control structure, deficiencies in the operation of the structure, and all other deficiencies. Because any internal control structure depends on the human factor, it is subject to flaws in design, errors of judgment or interpretation, misunderstanding, carelessness, fatigue, or distraction. While the competence and integrity of the personnel designing and operating the system may be controlled by selection and training, these qualities may alter due to pressures from within and outside the public body. Furthermore, no matter how competent the staff, the control they operate may become ineffective if they do not correctly understand their function in the control process or choose to ignore it.

#### **2.1.5. Value for Money**

The success for a public sector organization is the degree to which it fulfills its set objectives and mission in terms of being efficient, effective and economical. The Internal Control Systems are keys in achieving the organizational set mission and objectives; hence Value for Money. However, many authors hold that Value for Money is a term used to assess whether or not an organization has obtained the maximum benefit from the goods and services it acquires and / or provides, within the resources available to it. Value for Money (VFM) can be achieved by eradicating waste in benefits services processes and systems. Value for Money is not paying more for a good or service than its quality or availability justifies as well public spending implies

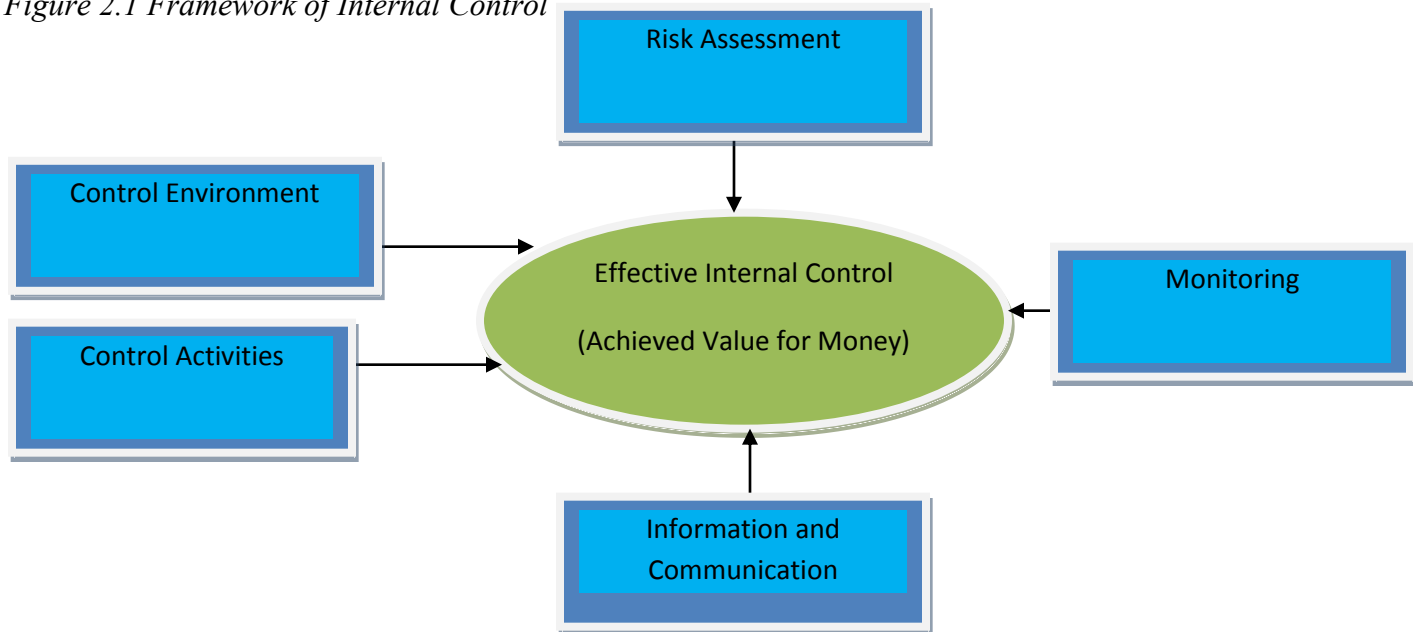
a concern with economy (cost minimization), efficiency (output maximization) and effectiveness (full attainment of the intended results) (Glendinning, 1998; Davies, 2007; Deakin 1998 ).

The most effective way to improve Value for Money is by reducing the level of irregularity and fraud through improvements in the Government's systems of internal financial control (Kaplan, 2009). Communities need to be assured that their resources are being used efficiently and effectively in providing the right service at the least cost. However, Kerr (2005) observed that the will to provide Value for Money in Government spending is weak because accountability to taxpayers and the public is generally weak. According to Heald (2003), VFM analysis needs to pay attention to total risks and VFM is related to concepts of efficiency and effectiveness. Fryer, Jiju, & Ogden, (2009) hold that despite a long period of implementing performance management within the public sector, improvements in performance, accountability, transparency, quality of service and Value for Money have not yet been achieved.

Government policies now promote effective control particularly in the management of resources while stressing the values of economy, efficiency and effectiveness (Value for Money) (Sanderson, 2001). Effective; Control Environment, Control Activities, Risk Assessment, Information and Communication, and Monitoring are a necessary to achieve organizational objectives and should achieve Value for Money (INTOSAI 2004).

Internal Control Systems were studied under the constructs of Control Environment, Control Activities, risk assessment, information and communication and monitoring while Value for Money constructs were Economy, Efficiency and Effectiveness. The model on INTOSAI (2004) shows that effective Internal Control Systems results in the achievement of Value for Money. The following diagram shows the relationship between components of internal control and value for money.

Figure 2.1 Framework of Internal Control



Source; developed from INTOSAI (2004)

## 2.2. Empirical Review

Despite rare studies on internal control in Ethiopia, several investigations were made in world to evaluate internal control of businesses and governmental institutions. Accordingly Ronald (2011) evaluated internal Control Weaknesses in Local Government. Towns and villages account for more than 1,400 municipal government entities in New York State constituted in the study. The study focused on the internal control issues identified in an extensive, ongoing series of audits of towns and villages undertaken by the New York State Comptroller's Office. All towns and villages audit reports issued by the office were examined. These general internal control audits were used to identify towns and villages with internal control weaknesses. The budgets of the towns reviewed were limited to an examination of the annual budget for the following year, reviewing the reasonableness of projected revenues and expenditures, the proper use of accumulated fund balance, and general financial condition of the municipality (especially deficit issues).

A review of the findings of more than 300 town and village audits conducted for four years showed that all but a handful of these public entities exhibited numerous governance and control deficiencies. The results also showed that there is much room for improvement. In addition, the study revealed that Small towns and villages have several inherent control limitations; small size limits the number and quality of personnel, and the extent and quality of oversight which are the components of internal control. The limitations were found evident in several of the weaknesses discovered.

Mahdi, Mahmoud, Shiri and Fatemeh (2011) investigated the effectiveness of internal control in the Iranian banking sector with special reference to Bank Mellat. The study used questions that needed to be answered in the study are: (1) Does an internal control system in Bank Mellat has proper power in preventing fraud and error? (2) Is there a significant relationship between the weakness of internal control system components (control environment, risk assessment, information and communication, control activities and monitoring) and the occurrence of error and fraud? To test the validity of the questions, hypotheses are postulated relating frequency of fraud reported as failure of internal control with the questionnaire answered on the relationship between the fraud and components of internal control. The paper evaluated the effect of control environment, control activities, risk assessment, information and communication and continuous monitoring on failure of internal control quantified as reported errors and fraud. The empirical evaluation found out that all the elements of the internal control have significant effect on occurrence of errors and fraud, though the magnitudes are different. Accordingly, Weakness of control environment, control activities, risk assessment, information and communication and monitoring as a component of internal control system in an incident of error and fraud is effective.

Therefore, the more the increase in the weakness of a control environment, control activities, risk assessment, information and communication and monitoring in Bank Mellat, the more is the incident of error and fraud. However, statistically control environment is found to have the highest effect for the failure of internal control.

A study by Roth and Espersen (2003) on the situation of internal control in companies introduced the components of an internal control (control environment, evaluating risks, control activities, information and communication and supervising) as an advocator for a company to achieve its goals as well as its own progressive procedures. The results suggest (a) Recognizing an internal control system and the role of corporate relationship; (b) Propagating self-control systems, (c) Identifying risk factors; and (d) Preventing incidents of fraud and financial mistakes.

Abu-Musa (2004) examined the existence and adequacy of implemented security controls in the Egyptian Banking Sector (EBS). The results revealed that the computer departments paid relatively more attention to technical security controls, while internal audit departments emphasized more on the behavioral and organizational security controls. The study also provided valuable empirical results regarding inadequacies of implemented Accounting Information Systems (AIS) security controls, and introduced some suggestions to strengthen and improve the security controls in the EBS.

Alaudin et al. (2006) focused on management control systems, justice and trust in the Malaysian Islamic banks with the help of a questionnaire and interview and examined the documents relating to the concepts of justice and trust. Due to the inherently complex nature of the internal control process, a study by O'Leary et al. (2006) spread itself across a broad range of auditing, accounting and general business areas, and stated that an adequate system of internal control is considered critical for good corporate governance.

Moses (2011) examined the effectiveness of Internal Control Systems in achieving Value for Money in school projects in Local Governments of Uganda. The purpose of the study was to identify the impact of internal control in achieving value for money. The study used a cross sectional survey design implementing self administered structured questionnaire to gather data. The respondents were drawn from the elected and appointed staff, staff from the Office of the Auditor General, members of the District Public Accounts Committee and the School; were requested to respond to existence of standards of internal control. In addition the respondents were requested to respond if existing internal control in the school project is efficient, effective and economical. The findings revealed that Internal Control Systems have a significant positive effect in achieving Value for Money. The study further reveals that there a significant positive relationship between the Control Environment, Control Activities, Risk Assessment, Information and Communication and Monitoring and Value for Money in Local Governments. The findings revealed that Internal Control Systems have a significant positive effect in achieving Value for Money. All the constructs of Internal Control Systems (Control Environment, Control Activities, Risk Assessment, Information and Communication and Monitoring) had a significant positive relationship with Value for Money.

Sartini and Wardiwiyono(2012) conducted an exploratory study on Internal control system for Islamic micro financing This paper aimed to evaluating the implementation of internal control system for Islamic micro financing. It also aims to investigate the implementation of an internal control system for financing activities practiced by Baitul Maal wat Tamwil (BMT), a special micro finance organization; in Indonesia system for Islamic financing is formulated.

Primary data that relate to the implementation of an internal control system for financing activities were obtained through a direct survey using questionnaires.

The data are then analyzed using descriptive statistic and qualitative analysis to find the implementations of the internal control system. BMTs in Indonesia have implemented an internal control system for their financing activities. The rank of the implementation is: information and communication; monitoring; control environment; risk assessment; and control activities. This study also indicates that the implementation of authorization and consultation to the Shariah Supervisory Board was low.

Palfi and Muresan (2009) examined the importance of a well-organized system of internal control in the banking sector. The analysis of the survey revealed that continuous collaboration based on periodical meetings, between all structures of bank, characterizes an effective internal audit department. Joseph and Victoria (2012) examined the effectiveness of internal control systems of listed firms in Ghana. The study used annual reports of a sample of 33 firms listed on the Ghana Stock Exchange. In measuring the level of internal control effectiveness, 23 items relating to internal control categorized under control environment, information and communication, risk assessment, control activities and monitoring were operated and the effectiveness score was determined based on the items. Overall internal control system showed an average level of effectiveness in this study, which implied an overall low level of effectiveness. Of the five categories assessed under internal control system, control environment showed a higher level of effectiveness.

Tekalign (2011) investigated if the existing internal control in public enterprises in Ethiopia contributing to accounting fraud. The survey instruments on 11 major public enterprises in Addis Ababa were conducted using self administered questionnaires to auditors and accountants. Frauds were represented as any violation of principles, manipulation of sales, expenses or inventories.

The result indicated that the respondents believe the existed internal controls were sufficient to keep possibility of accounting fraud to reasonably low level. Even though the internal control would detect accounting fraud, respondents require codes of conduct and employees training as additional tool to detect fraud events.

### **2.3. Conclusion and knowledge gap**

In general the literature indicates that organizations should invest heavily on the internal control and used to improve the quality of their internal control systems. The devotion of resources, knowledge, time and human power is needed for a number of reasons, notably: good internal control is good business by itself. It helps organizations ensure that operating, financial and compliance objectives are met.

Literatures indicate that there are different types of internal control. While most of the classifications are based on purposes of the controls, some other classifies them based on the control methods applied in the system. However, the objectives of every internal control system were to achieve organizational efficiency and effectiveness, meet corporate objective and ensure adherence to rules and regulations.

Internal control is integration of elements which are used to operate and control its system. The common elements/frame works are control environment, control activities, risk assessment, information and communications and monitoring. Control environment is the atmosphere or the stone at the top of internal control system. Control activities are policies and procedures used to operate the internal control system. Identifying risks caused by failure of internal control and an inherent risk of the system also a standard of ICS. A flow of communication by financial reports and accounting system plays role in effective internal control.

Monitoring is done continuously by external auditors, internal auditors and management; to review and evaluate the effectiveness of internal control, if corrective actions are required.

Internal control is not without limitation. Obviously ICS cannot guarantee an absolutely free of errors and fraud performances. The system is designed and operated by people, who can cause failure of internal control by inherent nature of errors or an intentional collusion.

The judgment whether internal control is dependent on the objective of the internal control and criteria's established by management. COSO set criteria's to evaluate effectiveness of internal control, in addition to existence of the standards of the control. The result of effective internal control is resulted in effectiveness in achieving objectives and efficiency in the process of operating the controls and being economical. This measure has been referred by several scholars as VFM.

The empirical literature indicated that; though internal control is reasonably a preventive shield of fraud and misappropriation of stewards of resources, several reported cases of multibillion dollar fraud and reporting scandals over the world have so far refueled public policy debates on internal control, that internal control become an issue of considerable interest to policy makers and management to avoid those fraud. Thus the studies reviewed internal control of organizations, and government units ICS in essence of preventing fraud.

Therefore it is not in doubt that studies and continuous improvements of ICS are needed in individual organization and in the country in summative to achieve the planned objective.

The context in Ethiopia doesn't seem sufficient in exploring internal control effectiveness of the government units, private organization and not for profit organizations. Particularly taking into consideration the recent reports of OFAG in government units, it is an area to put an intensive effort and contribute to the foundation of the development objective underway.

## CHAPTER THREE

### RESEARCH METHODOLOGY

As indicated in the literature section there are theories on internal control and several studies made to assess effectiveness of internal controls employing different methodologies of study. This chapter also used to address appropriate methods of evaluating internal control with justifications of selected methods. The chapter is structured as; Research Objectives (section 3.1) Research Approaches (section 3.2), and Research Methods Adopted (section 3.3)

#### 3.1. Research Objectives.

The main purpose of this study is to assess the effectiveness of internal control system in practice in Ethiopian public Universities and identify its areas of weaknesses.

Based on the this objective, the following are the specific research questions answered by the study

***RQ1:** Can the effectiveness of Control Environment be ascertained in the Universities?*

***RQ2:** Are the Control Activities effective in the Universities?*

***RQ3:** Is the Risk Assessment adequately practiced in the Universities?*

***RQ4:** Is there adequate Information and Communication component of internal control system in the Universities?*

***RQ5:** Is there effective Monitoring of internal control system in the Universities?*

***RQ6:** Is the internal control system of the Universities achieving Value for Money?*

***RQ7:** Where is/are areas of deficiencies in Internal Control System of the Universities?*

### **3.2. Research Approaches**

Research approaches are mechanisms of attaining research objectives. The approaches are adopted to achieve the best possible of the research objectives. Research approaches are also adopted based on the feasibility of the selected approaches. The common research approaches are quantitative, qualitative and mixed research approaches.

A quantitative approach is one in which the investigatory primarily uses postpositive claims for developing knowledge from cause and effect thinking, reduction to specific variables and hypotheses and questions, use of measurement and observation, and the test of theories, employees strategies of inquiry such as experiments and surveys (Creswell, 2009). Quantitative research approach uses two strategy of inquiry known as survey and experimental design. Survey research provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. Quantitative approach uses surveys of cross-sectional or longitudinal using self administered semi structured questionnaires or structured interviews for data collection, with the intent of generalizing from a sample to a population (Babbie, 1990). The data are collected on an instrument that measures attitudes, and the information collected is analyzed using statistical procedures and hypothesis testing.

Experimental research seeks to determine if a specific treatment influences an outcome by providing a specific treatment to one group and withholding it from another and determining how both groups scored on an outcome (Creswell, 2009).

An alternate qualitative approach is one in which the inquirer often makes knowledge claims based primarily on constructivist perspectives (i.e., the multiple meanings of individual experiences meanings socially and historically constructed, with an intent of developing a theory or pattern) or advocacy/participatory perspectives (Creswell, 2003).

A qualitative research approach uses strategies of inquiry including narratives, ethnographies, case studies, observations, interviews, and the results are communicated subjectively through descriptions using words rather than numbers (Creswell, 2003, p.186-187). Moreover Qualitative researchers tend to use open-ended questions so that participants can express their views. Under this method contact with the field of research may be based on interviews, observations, or analysis of documents and other artifacts. In addition, literature studies are performed to the extent required to develop sensitivity in observation and interpretation (Atkinson and Hammersley, 1994).

Finally, a mixed methods approach is one in which the researcher tends to base knowledge claims on pragmatic grounds (e.g., consequence-oriented, problem-centered, and pluralistic). It employs strategies of inquiry that involve collecting data either simultaneously or sequentially to best understand research problem (Cresswell, 2009).

The data collection also involves gathering both numeric information (e.g., on instruments) as well as text information (e.g., on interviews) so that the final database represents both quantitative and qualitative information. The advantage of a quantitative research approach may be limitations for a qualitative approach and vice versa.

Mixed research approach, is supposed to tap the limitations of quantitative and qualitative approaches, bases on pragmatic knowledge claims (Sale et al, 2002). The goal for researchers using the mixed methods approach is to draw from the strengths and minimize the weaknesses of the quantitative and qualitative research approaches by combining them (Carrie, 2007).

### **3.3. Research Methods Adopted**

The study uses both quantitative and qualitative approaches. According to Creswell (2003) each approach has limitations which are possible to be minimized using the combined research approach. For example quantitative approach may cause bias in reliability of findings because of the nature of research problem, non representativeness of sample or the nature of questionnaires that predicts clue. In addition it is difficult to minimize the impact of human behavior using quantitative approach. Joseph (2006) justified that qualitative techniques can increase a research's depth of understanding of the phenomenon under investigation. Qualitative approach is exploratory and flexible in nature to identify problems that are affected by human behavior. Regardless of the above advantage, qualitative research design has its own demerits: lack of standardized rules reduces the objectivity of the findings, the personal view and stand of the researcher may induce bias in the interpretation of the data, and the findings cannot be statistically generalized for a broader population under investigation (Creswell, 2003).

Hence, the combined methods are aimed to complement one another and gather reliable information to draw representative outcome and conclusion.

#### **3.3.1. Quantitative Approach**

As noted earlier a quantitative approach is one in which the investigatory primarily uses postpositive claims for developing knowledge, employs strategies of inquiry such as experiments and surveys, and collect data on predetermined instruments that yield statistics data. Survey research provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. Even if there are two strategy of inquiry under quantitative approach, this study will use a survey design.

Survey method is advantageous for its merit of economy of design and it enables to gather enough information, which may not available from other sources. The purpose of survey research is to generalize from the sample to the population so that inferences can be made about some characteristic, attitude or behavior of the population (Creswell.2009).

Also Fowler (1984) noted that the strengths of survey methods that result in their wider use included the value of statistical sampling, consistent measurement, and the ability to obtain information not systematically available elsewhere or in the form needed for analysis. Consequently for its merit of economy and enables to gather enough information, survey method will be employed in this study.

#### **3.3.1.1. Sample Design**

According to research scholars, sample shouldn't be too large to be economical and shouldn't be too small to keep validity of findings. Accordingly this study used two sampling stages. The first one is to sample out the Universities and secondly the number of respondents within the Universities. According to Ethiopian Ministry of Education (MOE) currently there are 33 public Universities excluding Defense University, Kotebe CTE and, Telecommunications and IT College. From the existing 33 government Universities in Ethiopia five Universities were selected for their convenience to collect data and more over some others are yet to be audited by OFAG. The name of the Universities are; Addis Ababa University ,Adama Science and Technology University, Ethiopian Civil Service University, Samara University and Hawassa University. It was convenient for the researcher to gather reliable and sufficient data from these Universities. In addition, three of the sample Universities were also not routinely exposed to an OFAG audit or have no good background on the audit opinions provided by the office. These reasons are the ground to assess internal control of these Universities.

In regard to number of respondents, there were a total of 150 employees of finance department and internal audit department of which 15 respondents from Addis Ababa University, 10 voluntary, finance and auditing section respondents from each of four remaining Universities were randomly selected to survey questionnaire on the internal control. Addis Ababa University is the larger size while the respondents are selected randomly because of similar nature of population.

### **3.3.1.2. Survey Instrument**

The survey instrument contains both open and closed ended questions. There is one open ended question that gives the respondent freedom to indicate the area not mentioned in the close ended questionnaire. The close ended questionnaires are developed in two sections. The first one is on the general aspect of the respondent and the second one is developed based on standard of internal control. The first section is aimed to evaluate whether the status and experience of the respondents has an impact on effectiveness of internal control. The second section is used to evaluate how effective the standards of the controls are in those samples of Universities. This section uses questions to finance and internal audit employees with response ranging from strongly agree to strongly disagree. Finally this method of data collection was considered appropriate because the information sought is not publicly available and the finance department employees including internal auditors in the Universities are in a good position to know the answers to the questions asked (see the instrument in appendix I).

### **3.3.2. Qualitative Approach**

Qualitative research approach is a means for exploring and understanding individuals or groups scribe to a social or human problem (Creswell, 2009). Qualitative research is typically used to answer questions of complex phenomena.

Thus, in the current study qualitative data is needed to address the final research objective stated as „identifying specific areas of deficiencies in internal control within the Universities“.

This can be accomplished by unstructured interviews to three (5) auditors of OFAG considering an advantage of those performed audit engagement in those institutions. This method results will argue or advocate the result of the quantitative approach; thus the replay from the respondent will be described and analyzed concurrently with the quantitative approach.

### **3.3.3. Data Analysis**

The quantitative approach establishes the relationship between effectiveness of internal control and the elements of internal control. As indicated in the literature section an effective internal control should in priority comprises those elements considered as frameworks. Secondly an effective internal control should be measured in terms of efficiency, economy and achievement of goal collectively referred to as Value for Money. Value for Money is measured using Economy (measured by doing less with fewer resources), Efficiency (doing the same as before, but with fewer resources) and Effectiveness (doing more than before with the same resources as now or less), ((Heald (2003), Fryer, Jiju, & Ogden, (2009), Kerr (2005)).

In both ways of evaluating effectiveness of internal control the data analysis is based on the reply by the respondents on their degree of agreement or disagreement with each of the questions on a five-point Likert response scale (Likert, 1932) that ranged from 5 “strongly agree (scored as 5) to “strongly disagree” (scored as 1). The expected mean for an effective internal control component is 5 or close to 5. However the analysis is based on how the mean response of the respondents is close to this expected value. A large amount of researchers use this methodology, because it is relatively easy for respondents to use, and responses from such a scale are likely to be reliable (Balzan and Baldacchino, 2007; Lam and Kolic, 2008).

For all questions a positive mean response more than 3 statistically suggests agreement with the statement/question, a positive mean response less than 3 implies disagreement and a mean response close to 3 indicates indifferent or offsetting differences. All of the questions are coded in such a way that a positive mean response of 4 and greater display that this component of internal control system adequately contributed to the effectiveness of internal control in the Universities, while a positive mean response less than 4 reveals that this component of Internal Control System not adequately contributed to effectiveness of the internal control (Joseph, 2007). Even though the mean response between 3 and 4 indicates the agreement with the statement, the interpretation implies, these areas are the room for improvement of the internal control system. The analysis involves instruments like descriptive statistics (means, Standard deviation, frequencies, and percentages) and inferential statistics (regression). The inferential statistics analysis is not the primary alternative to answer the research question. However the results may help as supplementary to the descriptive statistics. This is due to the fact that several studies showed the results of inferential statistics for nominal and ordinary data are not highly valid.

Finally, the qualitative data gathered through interview is presented and analyzed separately from the quantitative approach and to be combined to conclude the results.

## CHAPTER FOUR

### DATA ANALYSIS AND INTERPRETATIONS

The previous chapter discussed appropriate methodologies of evaluating effectiveness of internal control. This chapter presents the result and analysis of the survey method and semi structured interview. The chapter is organized into four broad sections. Section 4.1 presents Survey result, section 4.2 presents Interview result, section 4.3 analysis, and section 4.4 presents the Conclusion.

#### 4.1. Survey Results

This section presents the result and analyzes the data collected using self administered questionnaire from sample of 55 employees of finance department from Addis Ababa University, Adama University, Civil Service University, Hawasa University and Samara University. The section will be categorized as 4.1.1 Respondents profile; 4.1.2 Survey result on internal control system.

##### 4.1.1. Respondents' Profile

It is necessary to analyze the demographic profile of the respondents to validate reliability of data collected. Accordingly the respondents were asked to respond to their gender category, year of experience, level of education and field of qualification. The information processed by SPSS is summarized as follows.

**Table 4.1 Gender Categories of the Respondents**

	Gender	Frequency	Percent
Valid	Female	18	32.7
	Male	37	67.3
	Total	55	100.0

*Source; Survey Results and Own Computation*

As indicated in the above table the gender proportion of female respondents is 32.7% while the male respondents were 67.3%. Though the ratio of the respondents not proportional and varied both category of gender were participated in the survey. This enables the researcher that there is no bias in the survey instrument related to the gender of the respondents.

**Table 4.2 Experiences of the Respondents**

	Years of Experience	Frequency	Percent
Valid	Greater than 5 less than 10	29	52.7
	Greater than 10	26	47.3
	Total	55	100.0

*Source; Survey Results and Own Computation*

Experience is one of the competences to understand internal control in a company. Experience also referred to as professional competence. In the literature it is indicated that commitment to this competence by employees is one part of effective control environment in internal control system. The more experienced employees are the more they understand about the internal control they execute. Out of the survey, 47.3% of the respondents as indicated in table 4.2 were experience with years more than 10. The remaining 52.7% were at least has an experience between 5 to 10 years. This indicates that the employees working in the key areas of internal control system are well experienced both to respond to the questionnaire, and to understand or implement the control system.

**Table 4.3 Education Level of the Respondents**

	Level of Education	Frequency	Percent
Valid	Diploma and below	0	0
	Degree and Above	55	100.0

*Source; Survey Results and Own Computation*

Another commitment of employees to competence that contributes to effectiveness of internal control is the level of education the employees possesses. This competence is referred to as academic competence. The control environment component of internal control system reveals that a good education level has a positive impact on effectiveness of internal control. As summarized in the above table, all the respondents (100%) were qualified in degree and above which is favorable. This is an indication that the respondents are also at adequate education level to understand the concept of internal control system.

**Table 4.4 Field Of Qualification of the Respondents**

	Fields of Qualification	Frequency	Percent
Valid	Management	10	18.2
	Accounting	40	72.7
	Other Fields	5	9.1
	Total	55	100.0

*Source; Survey Results and Own Computation*

Internal control is primarily the responsibility of management. The broader category of internal control is operational and accounting control. Obviously the respondents with knowledge of management and accounting understand the concept of internal control system than others. Thus the survey made to assess the areas of qualification of the respondents presented in table 4.4 indicated that 72.7% of the respondents were qualified in accounting and 18.2% were qualified in management. This means the respondents had at least had the theoretical education on the concept of internal control.

In general the respondents profile indicates that the respondents were good enough to respond to the questionnaire and they had the knowledge and experiences to understand internal control system in their Universities.

#### **4.1.2. Examining Effectiveness of Elements of Internal Control**

Recalling statement of COSO (1994); an effective internal control has five components; control environment, control activities, risk assessment, information and communication and monitoring. The effective functioning of components of internal control provides a reasonable assurance regarding achievement of stated objectives to ensure high levels of organizational performance. The design and implementation of each element of internal control affect the overall effectiveness of internal control. As indicated in the literature section of this study effective internal control achieve its objectives which are; ensuring achievement of organizational objective, safeguarding asset and ensuring compliance to rules and regulations. The specific objectives of this study were to evaluate the effectiveness of each components of the internal control as a foundation for evaluation of effectiveness of internal control system as a whole.. Based on the survey instrument through questionnaire the respondents were asked to scale their degree of agreement whether each items under elements of internal control practiced in their respective University. The results are presented and analyzed as subsequent to reliability test of the survey instrument.

##### **4.1.2.1. Reliability Test of Instrument**

One of the common methods to test the reliability and validity of data collected through questionnaire is use of Cronbach's alpha coefficient. Lee Cronbach (1951) defines Reliability as an attribute of an instrument used to measure consistency. Consistency indicates that an instrument has constructive value it used to measure. A commonly accepted rule of thumb for describing internal consistency using Cronbach's alpha is as follows

**Table 4.5 Lee Cronbach' Reliability Estimation Table**

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable
$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

The Cronbach's alpha for data collected for 32 components of control environment, control activities, risk assessment, information and communication and monitoring is 0.885(approximated to 0.9).

**Table 4.6. Reliability Statistics**

Cronbach's Alpha	N of Items
.885	32

*Source; Survey Results and Own Computation*

This indicates that the survey instrument used is highly valid and the data are highly consistent because the Cronbach's alpha is ranged in an excellent measure of internal consistency.

#### **4.1.2.2. Effectiveness of Control Environment**

Control environment considered as a „tone on the top“ in internal control system. It indicates the general atmosphere of internal control which includes the policies and procedures of internal control, management structure, reporting structure, competence of employees and discharging responsibility and others.

The survey made is based on those components of control environment and the result is scaled as follows.

<b>Table 4.7. Control Environment</b>					
	N	Min	Max	Mean	Std. Deviation
1. In the University there is clear separation of roles and responsibilities	55	2	5	3.53	1.152
2. The policies, procedures and guidelines in the University are documented.	55	1	5	3.60	1.180
3. The University has a clear organizational structure.	55	1	5	3.85	1.208
4. The reporting structure is clearly stipulated	55	1	5	3.13	1.263
5. All employees in charge of the University program are aware of the guidelines of the program	55	1	5	2.96	1.105
6. All staff in charge perform their responsibilities as per the regulations and guidelines	55	1	5	3.47	1.303
7. Segregation / separation of roles can lead to attainment of set University objectives.	55	2	5	3.76	.981
8. The control environment in your University is enough to attain the University set objectives	55	1	4	2.98	.952
9. Segregation / separation of roles can lead minimizing of costs.	55	1	5	3.45	1.214
Valid N (listwise)	55				

*Source; Survey Results and Own Computation*

As indicated in above table the mean value of the response computed based on Likert scale indicated the average agreement of respondents on existence and practice of each element of internal control. The overall mean of the control environment can be approximated to 3.5 which indicate an agreement in practices of control environment but rooms for improvement.

The highest mean 3.85 indicates that majority of respondents agreed that there is a clear organizational structure in their respective Universities. In an effective control environment a separation of roles has to obtain company objective. The result of the survey is also in line with this theory which is indicated by mean value of 3.76. This means majority of the respondents agreed that the clear line of responsibility enables achievement of objectives.

The above table also indicated three areas; where the control environment of the Universities is not effective. The least mean 2.96 indicates that majority of the respondents disagreed that all employees in charge of the University program are aware of the guidelines of the program. In percentiles 47.3% of respondents disagreed with this statement while 40% of respondents either agree or strongly agree and the remaining undecided (Appendix III, CE05).

From the table it is also indicated that there is a doubt by the respondent's whether there is clear reporting structure (mean 3.13) and this element also indicated the highest standard deviation (1.26). Finally the mean 2.98 implies that majority of respondents were not agreed that the control environment in the Universities was enough to attain the Universities set objectives.

#### **4.1.2.3. Effectiveness of Control Activities**

Control activities include methods as; preparation of reliable reports, update documentation, authorization of transactions, independent review and others. The result of the survey indicated in the table below shows that the degree of agreement ranged from 1 to 5 by respondents in all criteria's of control activities. The Overall mean of the control activities for the nine questions can be estimated to 3.6 which is good. The highest standard deviation of the response was showed in question number 11 which is about „a clear segregation of accounting procedures“.

The highest mean (3.78) indicated on table 4.8 confirm that majority of respondents agree that the policies and procedures can lead to producing reliable financial reports.

Subsequently mean of 3.76 indicated on the table also indicate that majority agree that the Universities expenditures are duly approved by authorized persons.

<b>Table 4.8 control Activities</b>					
	N	Min	Max	Mean	Std. Deviation
10. Policies and procedures can lead to producing reliable financial reports.	55	1	5	3.78	1.031
11. Accounting procedures of in the University Are Clearly Segregated.	55	1	5	3.45	1.345
12. The University expenditures are duly approved in advance by appropriately authorized persons.	55	1	5	3.76	1.154
14. Authorization, processing, cheque signing and accounting functions are clearly segregated under the University program	55	1	5	3.53	1.120
15. The University invoices or requests for disbursements are backed by appropriate supporting documents.	55	1	5	3.65	.985
16. There is an up-to-date asset register	55	1	5	3.22	1.272
17. The procurement and disposal of assets procedure is strictly followed under the University program	55	1	5	2.95	1.026
18. Bank reconciliations are prepared by someone independent of the cash receiving, processing and recording activities.	55	1	5	3.56	1.198
19. Someone other than the preparer reviews and approves bank reconciliations	55	1	5	3.42	1.066
Valid N (listwise)	55				

*Source; Survey Results and Own Computation*

The lowest mean 2.95 indicated that the procurement and disposal of an assets procedure is not followed strictly under the Universities program. In this regard total of 41.8% disagreed and strongly disagreed while 23.6% undecided on the matter (Appendix III, CA17). Another lower means 3.22 and 3.45 indicated that that there is lacks up to date asset register in the Universities and inadequate segregation of accounting procedures in the Universities respectively.

#### 4.1.2.4. Effectiveness of Risk Assessment

Risk assessments become an integral part of internal control system. The management is responsible to identify and assess control risk caused by failure of internal control. There should be strategies of identifying Risk, system to respond to risk and reduce the risk. The survey result and analysis on this issue therefore; is presented as follows.

<b>Table 4.9 Risk Assessment</b>					
	N	Min	Max	Mean	Std. Deviation
20. The University committee has designed an appropriate strategy of identifying risks	55	1	4	2.96	.922
21. The Committee designed a system to offer appropriate response to risks	55	1	5	2.93	1.034
22. It is management's role to identify, evaluate and respond to risk	55	1	5	3.36	1.078
23. Involvement of the Internal Audit staff during implementation reduces the occurrence of risk.	55	1	5	3.60	1.065
Valid N (listwise)	55				

*Source; Survey Results and Own Computation*

From the table it shows that was no employee strongly agreed that there exists appropriate strategy of identifying risks (Min 1 and Max 4). The Universities have not sufficiently designed appropriate strategy of identifying risk and no sufficient system designed to respond to risk (2.96 and 2.93) respectively. About 54.5% of respondents were collectively either disagreed or undecided that the management is identifying, evaluating and responding to the risks (Appendix III RA22). An average agrees that Audit staff during implementation reduces the occurrence of risk (mean 3.6).

#### 4.1.2.5. Effectiveness of Information and Communication

Based on frameworks of an effective information and communication in an internal control system the survey result and interpretation as presented below.

	N	Min	Max	Mean	Std. Deviation
24. Information should be communicated to all stakeholders.	55	1	5	3.13	1.171
25. Transactions are promptly recorded and classified to provide reliable information.	55	1	5	3.29	1.149
26. Communication helps to evaluate how well the guidelines of in the University are working.	55	1	5	3.78	.937
27. The Accounting Officer publicizes the funds received	55	1	5	3.33	1.123
Valid N (listwise)	55				

*Source; Survey Results and Own Computation*

As summarized in above table the minimum response to each standard of information and communication is 1 and the maximum is 5. The respondents relatively agreed that the communication helps to evaluate how well the guidelines of the University are working. The survey result mean (3.13) indicates that 52.7% of respondents strongly disagreed, disagreed or undecided; the remaining 47.2% agreed or strongly agreed that communication is made to all stakeholders (Appendix III, IA24). This element of information and communication degree of agreement varied among respondents with standard deviation of 1.17.

The means 3.29 and 3.33 are also slightly different from 3 which imply no convincing numbers of respondents believe that transactions are promptly recorded in the Universities or any funds received by Universities are publicized.

#### 4.1.2.6. Effectiveness of Monitoring

An ongoing monitoring of internal control is vital to ensure whether internal control is achieving desired objectives. According to Coffin (2003) monitoring entails the activities and procedures designed to assess the effectiveness of the internal control system in achieving the entity's financial reporting objectives. The result and interpretation of the survey is presented as follows.

<b>Table 4.11 Monitoring</b>					
	N	Min	Max	Mean	Std. Deviation
28. Monitoring is important if the University program is to achieve its set objectives	55	2	5	3.80	.970
29. Monitoring is built into the normal operating activities	55	2	5	3.36	.950
30. Monitoring is on continuous basis	55	2	5	3.04	.962
31. Monitoring helps to determine whether controls under the University are effective	55	2	5	3.29	.994
32. Monitoring covers the evaluation of the effectiveness of internal control in achieving set objectives	55	2	5	3.25	1.022
33. Council considers audit findings and recommendations and takes adequate actions	55	1	5	3.13	1.171
Valid N (listwise)	55				

*Source; Survey Results and Own Computation*

An estimated overall mean of monitoring components indicate that there are areas of improvements. In the majority of monitoring criteria's practices the respondent's minimum degree of agreement is 2. This implies that there were few respondents strongly disagreed with the practices of monitoring in the Universities.

Majority of respondents don't believe that monitoring in the Universities is on the continuous basis (mean 3.04). On the other hand the Universities higher authority fails to consider sufficiently the audit findings and recommendations to take necessary corrective actions (mean 3.13).

#### 4.1.2.7. Value for Money

Internal control is effective when value for money is achieved. An effective internal control is economical, efficient, achieve its objectives and adhere to rules and regulations. The survey result from the respondents on achievement of value for money is presented as follows.

<b>Table 4.12 Value For Money</b>					
	N	Min	Max	Mean	Std. Deviation
34. The success of the University service is the degree to which it attains its set objectives.	55	2	5	3.71	.786
35. The attainment of VFM is based on the use of the University resources in order to achieve its set objectives	55	1	5	3.44	1.214
36. Internal Audit staff carry out regular reviews to ascertain whether the University achieved value for money for all its activities	55	1	5	3.02	1.284
37. Management carries out Monitoring and Evaluation and control operations in order to achieve VFM.	55	1	5	3.18	1.219
38. VFM is improved by reducing the level of irregularity and fraud under the University activities	55	2	5	3.38	.828
39. The quality of service by the University assures the community that funds are well utilized	55	1	5	3.11	1.181
40. Government gets assured of VFM if costs incurred by Universities are reasonable.	55	1	5	3.45	.919
41. The commitment by the management of the University in providing VFM in its program is strong	55	1	5	2.60	1.132
Valid N (listwise)	55				

*Source; Survey Results and Own Computation*

Except one questions under value for money, almost all mean responses are slightly different from 3. The highest mean (3.71) implies that majority of respondents believe that the degree of success by the University is the degree it attains its objective. In the other word Universities achieve value for money when set objectives are attained.

The other results on value for money represents deficiency in achieving value for money. For example the lowest mean 2.6 implies that the commitment of the Universities management in providing value for money is weak. In percentiles 54.5% strongly disagreed or disagreed, 18.2% undecided, and only 27.2% agreed or strongly agreed that the commitment of Universities management is strong in achieving value for money. The above table furthermore indicates that there is insufficient internal audit in carrying out regular reviews to ascertain that value for money is achieved (mean 3.01). Similarly the management is not adequately monitoring and evaluating that value for money is achieved (mean 3.18). Value for money is also achieved when level of irregularities and frauds are reduced activities of organizations. The mean response for this question is 3.38 which is 12.7% disagreed, 45.5% undecided, 32.7% agreed and 9.1% strongly agreed in percentiles( Appendix III,VFM38). This implies that only 41.8% agreed or strongly agreed that level of irregularities and frauds is reduced in the Universities activities. The respondents are asked whether the quality of service by the University assures the community that funds are well utilized, and the mean response 3.11 implied that 52.7% strongly disagreed, disagreed or undecided; while the remaining 47.3% of the respondents agreed or strongly agreed that quality of the service by Universities guarantee the public that Universities budget is well utilized. The practice of an internal audit is key in effective internal control ,the highest standard deviation(1.28) indicated in the above table shows that respondents ideas varied highly that internal audit is properly reviewing achievement of value for money in the institutions.

### **4.1.3. Regression Result between Value for Money and Elements of Internal Control**

The theoretical frame work of effective internal control (achievement of value for money) and elements of internal control is presented the literature section is used as a base to relate the variables. In theory an effective components of the control are positively contributed to effectiveness of internal control system; overall measured as achievement of value for money (INTOSAI, 2004). Empirically, Moses (2011) examined the predictability of elements of internal control over achievement of value for money and found out that control environment, risk assessment and monitoring have significant predictability of value for money. This study used mean responses on each elements of internal control to evaluate their impact on achievement of value for money using Optimal Scaling regression model which is appropriate for categorical variables. The regression result indicated that, monitoring, control activities, risk assessment and information and communication have a significant predictability of value for money at 5% significance level.

**Table 4.13 Regression Result**

<b>Coefficients</b>					
	Standardized Coefficients		df	F	Sig.
	Beta	Std. Error			
Control Environment	.110	.122	2	.803	.455
Control Activities	-.507*	.122	3	-17.142	.000
Risk Assessment	-.262*	.118	3	-4.905	.005
Information and Communication	-.307*	.141	1	-4.748	.035
Monitoring	.798*	.160	4	24.984	.000
Dependent Variable: Value For Money Multiple R=.691 R square=.478 Adjusted R square=.312 F=2.885 Sig=.005					

*Source; SPSS Results*

Monitoring had a positive and significant impact on achieving value for money with beta of 79.8%. Though the control activities, risk assessments, and information and communication are significant variables they indicate negative beta coefficient, meaning these components of internal control not achieving value for money in the institutions. In this regard the result is in line with Moses (2011). In general the model summary indicates that the elements of internal control explained 31.2% achievement of value for money. This result is very close to Christine et.al (2011) and Moses (2011) with prediction percentage of 35.69% and 37.1% respectively. Despite the fact that the theory of internal control states that effectiveness of internal control is highly predicted by its components, this result indicates that the components of the internal control are not adequately practiced. As revealed in above table three components of internal control negatively contributed to achievement of value for money; namely risk assessment, control activities and information and communications.

#### **4.2. Interview Results**

An interview made with Auditors of OFAG on the effectiveness of internal control in the Universities is objected to identify the areas of deficiencies in internal control in the institutions. The major areas of questions were; audit coverage of the office in the Universities, criteria's to evaluate internal control and the areas of weaknesses observed in the Universities. The discussion from the interview is presented below.

In the first place the interviewees were asked whether OFAG is auditing the entire public Universities in the country. Accordingly the interviewees agreed that almost all Universities are under audit by the office except Addis Ababa University and Haromaya University. These Universities were not audited because of the large size of the Universities and limitation of human resource in the office to conduct an audit. However the two Universities were to be audited by external auditors under mandate of audit Service Corporation. The audit service corporation also not yet audited Addis Ababa University because of the problem of backlog works needed and insufficient documentation. The directorates also revealed that the office have been performing a back audit for several years which is to audit previous years statement being on current period. However, currently the office is performing an interim audit of the reporting year. This indicates that OFAG is performing the audit mandate on timely basis.

Assessment of internal control is a task to be performed as a field work standard of audit engagement. Based on the standard of audit requirement the interviewees were asked to explain internal control assessment stage of the audit in the Universities.

The directorates explain that internal control assessment is made in the Universities and it is part of the audit plan which they claim covers more than 50% of total audit work. In the assessment of the internal control the criteria's to evaluate the internal control effectiveness is based on the checklist developed for English speaking African countries referred to as AFROSAI though this task is more of a judgment by the auditors at work in respective Universities. . Based on this checklist the OFAG auditors evaluate internal control of the Universities through internal control assessment stages referred to as understanding control and test of control to conclude that internal control in the University is either „adequate“ or „inadequate“. In the understanding of control auditors assess the policy and design of internal control through inquiry to management and oral communication. In test of control auditors evaluate implementation of internal control through observation and sample test. In general according to the guideline of OFAG auditors perform the following procedures to assess adequacy of internal control in the Universities.

**Establishment:** the auditor reads all the existing literature of the company pertaining to its accounting system and auditing manuals, flow charts, accounting records and forms to obtain a basic knowledge of the systems as designed and installed by management.

**Test:** the auditor carries out the test by walking through limited documents and by inquiry whether the established procedures and controls are being employed. He can also conduct personal interview with responsible officers in the organization.

**Evaluate:** the auditor evaluates the effectiveness of procedures and quality of controls employed, for him/her to determine the degree of reliance which he/she has to place on the existing controls within the establishment.

**Confirm:** after satisfying himself with the quality of the control, he still have to examine and confirm his preliminary conclusion that system is functioning effectively and that it is producing clerical accuracy.

**Conclude:** he/she should conclude by stating that procedures are effective( adequate) and controls are reliable and that weaknesses will not result in material errors and thereafter recommend possible improvement in procedures and control to the management.

According to interviewees explanation except the risk assessment components of internal control environment, control activities, information and communication and monitoring are practiced in the Universities. Risk assessment is new for all Universities though financial regulation 8/2003 requires government institutions to identify possible risks and develop procedures to control the risks. One of the interviewees claims that there is also a deficiency in control environment component of the Universities particularly in assigning appropriate employees on appropriate duty. In most Universities acquisitions are made by academic staff which made the expenditures control complicated in recent years.

In general the interviewees conclude that the internal control in the Universities is inconsistent; while it is better in a few it is worst in most of the Universities. The major cause for this according to the interviewees is there is insufficient monitoring from government to make Universities take corrective measures. The OFAG responsibility is to audit the institutions and report to the house of people's representative; while the team in the parliament referred to as "public accounting audit team" has a mandate to take corrective measures on public institutions. However, the directorates of OFAG believe the team is not discharging its responsibility adequately that is the caused a continued deficiencies in internal control.

### 4.3. Analysis

To state again, the broad objective of this study was examining effectiveness of internal control system in the public Universities and identify the areas of weaknesses in the system. This broad objective is systematically broken down to specific research questions presented in the previous chapters. To answer these research questions the survey method and the interviews were used. The descriptive statistics and inferential statistics under the survey method were presented in the previous section. The interview result is also presented subsequent to the survey. This section combines the two methods to answer the research question as follows.

***RQ1:** Is the effectiveness of control environment can be ascertained in the Universities?*

The survey result indicated Table 4.7 implies three areas of deficiencies in control environment with a mean less than 3 and slightly different from 3. First, not all Universities employees understand the policy and program of their Universities (mean 2.96), secondly there is lack of adequately identified lines of responsibility and report (mean 3.13) and overall the control environment is not enough to meet required objectives (2.98). An interview result related to practice of control environment indicates also area of weakness in this area. Particularly the interviewees' claim; there lacks competence of employees in assigning responsibility. As an example according to the interviewees', asset procurement and acquisitions are made by employees recruited from academic staff who are less experienced in this area. Overall both the survey result and the interview imply there is not enough evidence to ascertain the control environment practice is effective.

In general the control environment of the Universities cannot be ascertained as effective because of lack of clear reporting structure; inadequate understanding of Universities rules and programs by employees that result in failure of an internal control to achieve set objectives.

***RQ2:** Is the control activities are effective in the Universities?*

Control activities are specific methods and procedures of implementing internal control. Effective internal control has a list of those methods and procedures that are to be implemented consistently. As presented on table 4.8 majority of respondents believed that a clear policies and procedures can lead to producing reliable financial reports. Other favorable practice is that the Universities expenditures are duly approved by authorized persons (mean 3.76). In an effective control activities there should be clear procedures of asset procurement and disposal, updated asset register and clear separation of accounting duties. However these were areas of deficiencies seen on the survey result is; the procurement and disposal of an assets procedure is not followed strictly under the Universities program. The other problems in control procedures were lacks of up to date asset register in the Universities and inadequate segregation of accounting procedures in the Universities. An interview result is consistent with this finding that interviewees indicated in some Universities there is poor separation of duties. The auditors explained some practical cases that; employees authorizing transactions are performing accounting duties in some Universities. As clearly indicated from both results the control activities and procedures are not effective in the Universities.

***RQ3: Is the risk assessment adequately practiced in the Universities?***

To hark back major issues in an effective risk assessment in the literature; risk assessment is responsibility of management. The management should identify and assess control risk caused by failure of internal control. There should be strategies of identifying Risk, system to respond to risk and reduce the risk. Table 4.9 revealed that the risk assessment in the Universities is incredibly adverse. The Universities have not sufficiently designed appropriate strategy of identifying risk and no sufficient system designed to respond to risk (mean 2.96 and 2.93) respectively. Though the management is responsible to identify, evaluate and respond to risks, managements of the Universities were not performing these risk assessment task. Failure to assess the risks may expose the institutions to face control risk. According to OFAG auditors there are no risk assessment practices in the Universities and it is new for the Universities.

This result is also supported by some responses through open ended questionnaire to respondents who claimed that there is no risk assessment in Universities at all. Thus, it is totally impossible to conclude that there is an effective risk assessment in the Universities.

***RQ4: Are there adequate information and communication components and practice of internal control system in the Universities?***

In a good organization, information system is essential to guide its operation process. Information systems produce reports, containing operational financial and compliance related information that makes it possible to run and control an organization (COSO, 1992). Guy et al (1999), state that the information should be communicated to all stakeholders. Result of the survey indicated that majority of the respondents knows the use of communication in evaluating how well the guidelines of the University are working.

An effective internal control system communicates information to all stake holders, transactions should be recorded promptly. However the results indicated that information is not communicated to all stakeholders. There lacks a prompt record of transactions in the Universities and there is lack of information related to some fund sources and how the funds are allocated. The interview results regarding the information and communication is not different from the survey result. The OFAG auditors claim the reporting procedures and line of reporting are weak in most of the public Universities in Ethiopia.

In general the information and communication is statistically weak to conclude as effective and not effective enough to attain the Universities objective.

***RQ5:** Is there effective monitoring of internal control system in the Universities?*

Monitoring in an effective internal control system is required to continuously evaluate whether the system is performing as per the design. Managers should also take in to account the finding of either internal or external auditors to take corrective actions in any failure of internal control. Jones (2008) refers on an on-going basis, staff should evaluate the various systems of internal control and updates/modifies/enhances where needed. However the survey result (table 4.11) indicates that monitoring in the Universities is not well implemented on an ongoing basis (mean 3.04). The Universities management also rarely takes into consideration auditors finding to improve quality of internal control and reduce control risks. The directorate's idea related to monitoring component of internal control reveals that Universities are not considering the audit findings and auditors consultancy ideas. The correlation and regression result indicated that monitoring as a component of internal control performed better than other elements. However with expected value for effective element of an internal control, monitoring is not practiced adequately and not to be judged as effective.

***RQ6:** Is the internal control system of the Universities achieving value for money?*

Value for money indicates that the objectives of internal controls are achieved (INTOSAI, 2004). An effective internal control is economical, efficient, achieve objectives and adhere to rules and regulations. Value for money is also achieved when level of irregularities and frauds are reduced activities of organizations. The respondents are asked whether the quality of service by the University assures the community that funds are well utilized. Management commitment is vital in monitoring that value for money is achieved. There should be also an internal audit persistently evaluating the achievement of value for money. The survey results (table 4.12) based on the questionnaire to gather data whether value for money is achieved signified low scores. Particularly mean 2.6 and 3.01 imply that the commitment of the Universities management in providing value for money is weak and that there is insufficient internal audit in carrying out regular reviews to ascertain that value for money is achieved. The correlation and regression results signified a weak statistical strength of elements of internal control in achieving value for money. To conclude, the internal control system in the Universities is not achieving value for money at high standard because of poor performance of Universities management in controlling and monitoring overall internal controls, failure of assessing risks, poor communication and some insufficient implementation of control procedures.

***RQ7:** Where is/are areas of deficiencies in internal control system of the Universities?*

This research question is based on the findings of the previous research questions. Both the survey method and an interview thoroughly identified the specific areas of internal control weaknesses in the Universities.

Accordingly the control environment had basic failures related to reporting structure, assignment of employees to appropriate tasks and a questionable commitment of management towards the internal control. The control activities were not properly functioning in some areas particularly in separation of duties, lack of clear procedure of asset procurement and disposal, finally failure to update asset records. Risk assessment is found to be almost not in practice in the Universities which the possible reason for a recurring failure of the internal control system in the Universities reported by OFAG. The Universities lacked an integrated policy and procedures of risk identification and controls. Essential information is not adequately communicated to all stakeholders in the Universities and insufficient accounting records were the problems found related to information and communication. The follow-ups in the Universities seemed better, however this monitoring was not on continuous basis and rarely takes into account audit findings to take corrective actions. Overall the inferential statistics also indicated very weak explanatory power of the elements in achieving value for money in the Universities.

#### **4.4. Conclusion**

In this chapter data from survey results and the interviews were presented separately. Both the survey results and interviews were used to answer the research questions. Next the results of data gathered through questionnaire and interviews with independent OFAG officials were combined to answer the research questions and draw conclusion. The data gathered through questionnaire were tested to verify reliability of the instrument; and subsequently analyzed using descriptive statistics and inferential statistics on examining each elements of internal control. The descriptive statistics indicated a mean value of each components of internal control less than 4. A highly experienced OFAG Officials also responded to the interview on this area and identified specific areas of weaknesses in the internal control system. They officials furthermore had the policy recommendation to Ethiopian government how to improve the inconsistent internal control implementation in the public Universities. As a final point using both approaches of research; the internal controls in the Universities are not effective enough to achieve the control objectives. Particularly the risk assessment is found to be only theoretical and new to the Universities. The following chapter therefore presents the major findings of the study and possible recommendations.

## **CHAPTER FIVE**

### **CONCLUSION AND RECOMMENDATIONS**

The purpose of this chapter is to pinpoint the major findings of the study and indicate recommendations that can help in improvement of internal control system in the public Universities. Thus the chapter is organized as section 5.1. Conclusion which presents major findings of the study, and section 5.2 which presents recommendations based on the findings.

#### **5.1. Conclusion**

Internal Control is a policy, methods and practices employed for attainment of organizational objectives. These objectives are ensuring operational efficiency, safeguarding assets and adherence to rules and regulations. Both government and private institutions need a guarantee that the internal control system in their institutions is effective enough in attaining such objectives. As indicated in literature, customarily the management of organizations performs this task through monitoring the effectiveness of internal control they designed. Though managements may use different criteria's to evaluate effectiveness of an internal control, COSO (1992) revealed that; internal control effectiveness is resulted from an effective function of the control environment, control activities, the risk assessment, information flow and communication and monitoring of the system itself. INTOSAI (2004) indicates an effective functioning of these elements helps in achieving Value for Money which is an objective of effective internal controls.

The evaluation of internal control problems in Ethiopian context seems under developed. Government institutions under mandate of OFAG audit particularly public Universities are serially under criticisms of OFAG for years. Based on this ground it was necessary to examine the effectiveness of internal control in practices in Ethiopian public Universities.

The study aimed to assess whether there is an effective internal control, identify areas of deficiency, and there to indicate areas of emphasis to improve the internal control. To achieve these objectives a survey method is employed in quantitative approach. The survey method used questionnaires to employees in the Universities and analyzed through descriptive and inferential statistics analysis. A qualitative research approach used in the study used semi structured interviews with OFAG directorates. The questionnaires were aimed to examine whether components of internal controls were adequately practiced in the Universities. The interview was used to identify areas the OFAG officials believe as weaknesses of internal control system in the Universities. Using both approaches of research the internal controls in the Universities were not effective enough to achieve the control objectives afro mentioned. Particularly the risk assessment is found to be only theoretical and new to the Universities. The detailed findings and areas of deficiencies in internal control are summarized as follows.

- The competence level of employees practicing internal control in Universities from experiences and academic competence perspective can be concluded as good
- The control environment of the internal control system is inadequate to be judged as effective, particularly; all employees in charge of the Universities program are not aware of the guidelines of the Universities program.
- In addition the control environment of the Universities lacked a clear line of responsibility and stipulated structure of reporting
- The control activities of the Universities has also number of deficiencies like lack of updated asset register and documentation, substantial doubt on the separation of duties, and lack of effective procurement and disposal of assets in the Universities.

- The risk assessment is the weakest of the internal control system practice in the Universities.
- Risk assessment is considered to be new for the Universities; the managements were not adequately identified risk and developed clear procedures to control risks.
- Information necessary in the Universities are not adequately communicated to all stakeholders, transactions were not promptly recorded and some funds received are not adequately publicized.
- Monitoring is believed help in achievement of objectives; though in the Universities the monitoring was not on continuous basis.
- The monitoring was also not effective because it lacked covering evaluation of the effectiveness of internal control and didn't considered audit findings and recommendations and takes adequate actions.

## 5.2. Recommendations

There is no absolute guarantee from internal control that organizations objectives will be achieved. This implies the inherent limitations of internal control; that internal control is designed, operated and monitored by human beings. However it is possible to improve internal control effectiveness through continuous monitoring, related risk assessment, designing sound control methods and with good communication in the organization. From the result of this study it is impossible to conclude the internal control systems in the Universities are economical, efficient and effective. Both the respondents to questionnaire and an interview claim that the system is not good enough to achieve the Universities program at high standard. As stated by Spencer (2003) a control environment which is an entire commitment of managements from design of internal control to its monitoring should be strong enough to keep the other components of internal control in line. However, Based on the finding the following are specific areas that need due emphasis to improve the internal control system in the Universities.

- The human power of the Universities as a major component of control environment of the system has to understand the policies, directives and program of its respective University
- Internal control is a responsibility of management, employees and other stakeholders. Hence there should be a clear line of responsibility and structure of reporting to discharge any risk of collusion and fraud.
- Separation of accounting duty from authorization and custody of an asset is a key in detecting control risk. Thus due emphasis should be given to maintain segregation of duties.

- An updated asset register and adequate documentation should be maintained in the Universities to achieve effective control of activities
- An integrated system of procurement of asset and asset disposal also maintained in the Universities
- There should be a frameworks how Universities identify possible risks and strategies to control the risks
- Good information flow and line of communication risk of failure in internal control caused by information gap. Thus necessary information should be communicated to all stakeholders, transactions should be recorded promptly.
- The control system effectiveness should be evaluated against clearly established criteria's and should be monitored continuously. This is the responsibility of management and internal auditors.
- Some respondents believe that internal control in all public Universities should be integrated or consolidated to maintain the consistency of its implementation.
- Finally internal control system in the Universities is also responsibility of the government authorities to take corrective controls in a repeated failure of the system. The OFAG officials described their office as “toothless” and claim that it is a mandate of HPR Public Accounting Audit committee to take corrective measures on the Universities audited by OFAG. Hence it is necessary that this committee is discharging its responsibility to achieve an effective internal control in the public Universities.

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**APPENDICES**  
**APPENDIX I: QUESTIONNAIRE**

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**QUESTIONNAIRE FOR EVALUATION OF EFFECTIVENESS OF INTERNAL CONTROL SYSTEMS IN ETHIOPIAN UNIVERSITIES  
THE CASE OF; ADDIS ABABA UNIVERSITY, CIVIL SERVICE UNIVERSITY, SAMARA UNIVERSITY, HAWASSA UNIVERSITY AND ADAMA SCIENCE AND TECHNOLOGY UNIVERSITY**

This project is entitled Effectiveness of Internal Control in Ethiopian Universities. The investigator is Tsedal Lemi who is currently an Msc (in Accounting and Finance) student at Addis Ababa University.

The aim of this project is to evaluate effectiveness of an internal controls existing in the Ethiopian Universities. To supplement the data obtained from different sources, the investigator seeks to gather relevant information from a sample of 5 government Universities using self administered questions.

Participation in this project is completely voluntary, the questionnaire results will be recorded anonymously and strict confidentiality will be maintained. Individual responses will not be identified in the investigator's Msc thesis.

For further information please contact Tsedal Lemi by the following address.

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Email: - [tsed.lemi@yahoo.com](mailto:tsed.lemi@yahoo.com)

**I. Personal information of the respondent(Please, tick in the appropriate circle)**

- |                         | Female                | Male                  |
|-------------------------|-----------------------|-----------------------|
| 1. Your gender          | <input type="radio"/> | <input type="radio"/> |
| 2. Your year of service | <input type="radio"/> | <input type="radio"/> |
- >5 <= 10 years                      greater than 10

3. Your educational level Diploma Degree and above
4. Your field of profession Management Accounting Other

## II. Internal Control Systems (ICS) In the University and measure of Value For Money

This questionnaire is prepared based on the elements of internal control and its components.

Please, tick in the appropriate box against the statements as defined below; 1 = strongly

Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree and 5 = Strongly Agree.

<b>Control Environment</b>	<b>Strongly disagree</b>	<b>disagree</b>	<b>undecided</b>	<b>Agree</b>	<b>Strongly agree</b>
1. In the University there is clear separation of roles and responsibilities					
2. The policies, procedures and guidelines in the University are documented.					
3. The University has a clear organizational structure.					
4. The reporting structure is clearly stipulated					
5. All employees in charge of the University program are aware of the guidelines of the program					
6. All staff in charge perform their responsibilities as per the regulations and guidelines					
7. Segregation / separation of roles can lead to attainment of set University objectives.					
8. The control environment in your University is enough to attain the University set objectives					
9. Segregation / separation of roles can lead minimizing of costs.					
<b>Control Activities</b>					
10. Policies and procedures can lead to producing reliable financial					

reports.					
11. Accounting procedures of in the University Are Clearly Segregated.					
12. The University expenditures are duly approved in advance by appropriately authorized persons.					
13. Authorization, processing, cheque signing and accounting functions are clearly segregated under the University program					
14. The University invoices or requests for disbursements are backed by appropriate supporting documents.					
15. There is an up-to-date asset register					
16. The procurement and disposal of assets procedure is strictly followed under the University program					
17. Bank reconciliations are prepared by someone independent of the cash receiving, processing and recording activities.					
18. Someone other than the preparer reviews and approves bank reconciliations					
<b>Risk Assessment</b>					
19. The University committee has designed an appropriate strategy of identifying risks					
20. The Committee designed a system to offer appropriate response to risks					
21. It is management's role to					

identify, evaluate and respond to risk					
22. Involvement of the Internal Audit staff during implementation reduces the occurrence of risk.					
<b>Information and Communication</b>					
23. Information should be communicated to all stakeholders.					
24. Transactions are promptly recorded and classified to provide reliable information.					
25. Communication helps to evaluate how well the guidelines of in the University are working.					
26. The Accounting Officer publicizes the funds received					
<b>Monitoring</b>					
27. Monitoring is important if the University program is to achieve its set objectives					
28. Monitoring is built into the normal operating activities					
29. Monitoring is on continuous basis					
30. Monitoring helps to determine whether controls under the University are effective					
31. Monitoring covers the evaluation of the effectiveness of internal control in achieving set objectives					
32. Council considers audit findings and recommendations and takes adequate actions					

<b>Value For Money In the University</b>					
33. The success of the University service is the degree to which it attains its set objectives.					
34. The attainment of VFM is based on the use of the University resources in order to achieve its set objectives					
35. Internal Audit staff carry out regular reviews to ascertain whether the University achieved value for money for all its activities					
36. Management carries out Monitoring and Evaluation and control operations in order to achieve VFM.					
37. VFM is improved by reducing the level of irregularity and fraud under the University activities					
38. The quality of service by the University assures the community that funds are well utilized					
39. Government gets assured of VFM if costs incurred by Universities are reasonable.					
40. The commitment by the management of the University in providing VFM in its program is strong.					

*Dear respondent, using the following space you can put your general idea about the internal control or information you regard as necessary.-----*

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*“Let us cooperate to create strong internal control to achieve our development goal”*

## **APPENDIX II: NTERVIEW QUESTIONS**

### Interview Questions for Auditors of Office of Federal Audit

1. Do OFAG audit entire Universities in the country? ( If “No” please explain the reasons)
2. Do OFAG auditors assess internal control of the Universities?
3. What are the criteria’s of evaluating internal control of the Universities?
4. Do you think OFAG has a role in improving an internal control of the Universities?(explain)
5. Do you think all areas of internal control system (the control environment, control activities, risk assessment, information and communication, and monitoring) well designed and operating in the Universities? (explain)
6. Do you believe the internal control met the required goal of the institutions( explain how)
7. What is your idea about the effectiveness of the internal control and where is/are areas of the control you suggest an improvement?

**APPINDEX III FREQUENCY TABLES**

**CE01. In the University there is clear separation of roles and responsibilities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid disagree	15	27.3	27.3	27.3
undecided	10	18.2	18.2	45.5
agree	16	29.1	29.1	74.5
strongly agree	14	25.5	25.5	100.0
Total	55	100.0	100.0	

**CE02. The policies, procedures and guidelines in the University are documented.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	5	9.1	9.1	9.1
2	6	10.9	10.9	20.0
3	5	9.1	9.1	29.1
4	29	52.7	52.7	81.8
5	10	18.2	18.2	100.0
Total	55	100.0	100.0	

**CE03. The University has a clear organizational structure.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	5	9.1	9.1	9.1
2	3	5.5	5.5	14.5
3	5	9.1	9.1	23.6
4	24	43.6	43.6	67.3
5	18	32.7	32.7	100.0
Total	55	100.0	100.0	

**CE04. The reporting structure is clearly stipulated**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	4	7.3	7.3	7.3
2	18	32.7	32.7	40.0
3	10	18.2	18.2	58.2
4	13	23.6	23.6	81.8
5	10	18.2	18.2	100.0
Total	55	100.0	100.0	

**CE05. All employees in charge of the University program are aware of the guidelines of the program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	3.6	3.6	3.6
	2	24	43.6	43.6	47.3
	3	7	12.7	12.7	60.0
	4	18	32.7	32.7	92.7
	5	4	7.3	7.3	100.0
	Total	55	100.0	100.0	

**CE06. All staff in charge perform their responsibilities as per the regulations and guidelines**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	10.9	10.9	10.9
	2	10	18.2	18.2	29.1
	3	2	3.6	3.6	32.7
	4	26	47.3	47.3	80.0
	5	11	20.0	20.0	100.0
	Total	55	100.0	100.0	

**CE07. Segregation / separation of roles can lead to attainment of set University objectives.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	8	14.5	14.5	14.5
	3	10	18.2	18.2	32.7
	4	24	43.6	43.6	76.4
	5	13	23.6	23.6	100.0
	Total	55	100.0	100.0	

**CE08. The control environment in your University is enough to attain the University set objectives**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	5.5	5.5	5.5
	2	16	29.1	29.1	34.5
	3	15	27.3	27.3	61.8
	4	21	38.2	38.2	100.0
	Total	55	100.0	100.0	

**CE09. Segregation / separation of roles can lead minimizing of costs.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	10.9	10.9	10.9
	2	5	9.1	9.1	20.0
	3	12	21.8	21.8	41.8
	4	22	40.0	40.0	81.8
	5	10	18.2	18.2	100.0
	Total	55	100.0	100.0	

**CA10. Policies and procedures can lead to producing reliable financial reports.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	5.5	5.5	5.5
	2	5	9.1	9.1	14.5
	3	3	5.5	5.5	20.0
	4	34	61.8	61.8	81.8
	5	10	18.2	18.2	100.0
	Total	55	100.0	100.0	

**CA11. Accounting procedures of in the University Are Clearly Segregated.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	10.9	10.9	10.9
	2	11	20.0	20.0	30.9
	3	3	5.5	5.5	36.4
	4	22	40.0	40.0	76.4
	5	13	23.6	23.6	100.0
	Total	55	100.0	100.0	

**CA12. The University expenditures are duly approved in advance by appropriately authorized persons.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	5.5	5.5	5.5
	2	6	10.9	10.9	16.4
	3	8	14.5	14.5	30.9
	4	22	40.0	40.0	70.9
	5	16	29.1	29.1	100.0
	Total	55	100.0	100.0	

**CA14. Authorization, processing, cheque signing and accounting functions are clearly segregated under the University program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	5.5	5.5	5.5
	2	10	18.2	18.2	23.6
	3	5	9.1	9.1	32.7
	4	29	52.7	52.7	85.5
	5	8	14.5	14.5	100.0
	Total	55	100.0	100.0	

**CA15. The University invoices or requests for disbursements are backed by appropriate supporting documents.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	5.5	5.5	5.5
	2	4	7.3	7.3	12.7
	3	9	16.4	16.4	29.1
	4	32	58.2	58.2	87.3
	5	7	12.7	12.7	100.0
	Total	55	100.0	100.0	

**CA16. There is an up-to-date asset register**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	9.1	9.1	9.1
	2	14	25.5	25.5	34.5
	3	10	18.2	18.2	52.7
	4	16	29.1	29.1	81.8
	5	10	18.2	18.2	100.0
	Total	55	100.0	100.0	

**CA17. The procurement and disposal of assets procedure is strictly followed under the University program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	3.6	3.6	3.6
	2	21	38.2	38.2	41.8
	3	13	23.6	23.6	65.5
	4	16	29.1	29.1	94.5
	5	3	5.5	5.5	100.0
	Total	55	100.0	100.0	

**CA18. Bank reconciliations are prepared by someone independent of the cash receiving, processing and recording activities.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	5.5	5.5	5.5
	2	10	18.2	18.2	23.6
	3	8	14.5	14.5	38.2
	4	21	38.2	38.2	76.4
	5	13	23.6	23.6	100.0
	Total	55	100.0	100.0	

**CA19. Someone other than the preparer reviews and approves bank reconciliations**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	5.5	5.5	5.5
	2	10	18.2	18.2	23.6
	3	8	14.5	14.5	38.2
	4	29	52.7	52.7	90.9
	5	5	9.1	9.1	100.0
	Total	55	100.0	100.0	

**RA20. The University committee has designed an appropriate strategy of identifying risks**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	9.1	9.1	9.1
	2	9	16.4	16.4	25.5
	3	24	43.6	43.6	69.1
	4	17	30.9	30.9	100.0
	Total	55	100.0	100.0	

**RA21. The Committee designed a system to offer appropriate response to risks**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	9.1	9.1	9.1
	2	13	23.6	23.6	32.7
	3	21	38.2	38.2	70.9
	4	13	23.6	23.6	94.5
	5	3	5.5	5.5	100.0
	Total	55	100.0	100.0	

**RA22. It is management’s role to identify, evaluate and respond to risk**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	3.6	3.6	3.6
	2	10	18.2	18.2	21.8
	3	18	32.7	32.7	54.5
	4	16	29.1	29.1	83.6
	5	9	16.4	16.4	100.0
	Total	55	100.0	100.0	

**RA23. Involvement of the Internal Audit staff during implementation reduces the occurrence of risk.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	5.5	5.5	5.5
	2	5	9.1	9.1	14.5
	3	13	23.6	23.6	38.2
	4	24	43.6	43.6	81.8
	5	10	18.2	18.2	100.0
	Total	55	100.0	100.0	

**IC24. Information should be communicated to all stakeholders.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	9.1	9.1	9.1
	2	14	25.5	25.5	34.5
	3	10	18.2	18.2	52.7
	4	21	38.2	38.2	90.9
	5	5	9.1	9.1	100.0
	Total	55	100.0	100.0	

**IC25. Transactions are promptly recorded and classified to provide reliable information.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	9.1	9.1	9.1
	2	10	18.2	18.2	27.3
	3	9	16.4	16.4	43.6
	4	26	47.3	47.3	90.9
	5	5	9.1	9.1	100.0
	Total	55	100.0	100.0	

**IC26. Communication helps to evaluate how well the guidelines of in the University are working.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	1	1.8	1.8	1.8
2	6	10.9	10.9	12.7
3	7	12.7	12.7	25.5
4	31	56.4	56.4	81.8
5	10	18.2	18.2	100.0
Total	55	100.0	100.0	

**IC27. The Accounting Officer publicizes the funds received**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	5	9.1	9.1	9.1
2	10	18.2	18.2	27.3
3	5	9.1	9.1	36.4
4	32	58.2	58.2	94.5
5	3	5.5	5.5	100.0
Total	55	100.0	100.0	

**IC28. Monitoring is important if the University program is to achieve its set objectives**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2	8	14.5	14.5	14.5
3	8	14.5	14.5	29.1
4	26	47.3	47.3	76.4
5	13	23.6	23.6	100.0
Total	55	100.0	100.0	

**IC29. Monitoring is built into the normal operating activities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2	15	27.3	27.3	27.3
3	8	14.5	14.5	41.8
4	29	52.7	52.7	94.5
5	3	5.5	5.5	100.0
Total	55	100.0	100.0	

**IC30. Monitoring is on continuous basis**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	21	38.2	38.2	38.2
	3	14	25.5	25.5	63.6
	4	17	30.9	30.9	94.5
	5	3	5.5	5.5	100.0
	Total	55	100.0	100.0	

**IC31. Monitoring helps to determine whether controls under the University are effective**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	16	29.1	29.1	29.1
	3	12	21.8	21.8	50.9
	4	22	40.0	40.0	90.9
	5	5	9.1	9.1	100.0
	Total	55	100.0	100.0	

**IC32. Monitoring covers the evaluation of the effectiveness of internal control in achieving set objectives**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	18	32.7	32.7	32.7
	3	10	18.2	18.2	50.9
	4	22	40.0	40.0	90.9
	5	5	9.1	9.1	100.0
	Total	55	100.0	100.0	

**IC33. Council considers audit findings and recommendations and takes adequate actions**

		Frequency	Percent	Valid Percent	Cumulative Percent
/Valid	1	8	14.5	14.5	14.5
	2	7	12.7	12.7	27.3
	3	13	23.6	23.6	50.9
	4	24	43.6	43.6	94.5
	5	3	5.5	5.5	100.0
	Total	55	100.0	100.0	

**VFM34. The success of the University service is the degree to which it attains its set objectives.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid disagree	3	5.5	5.5	5.5
undecided	18	32.7	32.7	38.2
agree	26	47.3	47.3	85.5
strongly agree	8	14.5	14.5	100.0
Total	55	100.0	100.0	

**VFM 35. The attainment of VFM is based on the use of the University resources in order to achieve its set objectives**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	6	10.9	10.9	10.9
2	5	9.1	9.1	20.0
3	13	23.6	23.6	43.6
4	21	38.2	38.2	81.8
5	10	18.2	18.2	100.0
Total	55	100.0	100.0	

**VFM 36. Internal Audit staff carry out regular reviews to ascertain whether the University achieved value for money for all its activities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	5	9.1	9.1	9.1
2	21	38.2	38.2	47.3
3	5	9.1	9.1	56.4
4	16	29.1	29.1	85.5
5	8	14.5	14.5	100.0
Total	55	100.0	100.0	

**VFM 37. Management carries out Monitoring and Evaluation and control operations in order to achieve VFM.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	7	12.7	12.7	12.7
2	10	18.2	18.2	30.9
3	9	16.4	16.4	47.3
4	24	43.6	43.6	90.9
5	5	9.1	9.1	100.0
Total	55	100.0	100.0	

**VFM 38. VFM is improved by reducing the level of irregularity and fraud under the University activities**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	7	12.7	12.7	12.7
	3	25	45.5	45.5	58.2
	4	18	32.7	32.7	90.9
	5	5	9.1	9.1	100.0
	Total	55	100.0	100.0	

**VFM 39. The quality of service by the University assures the community that funds are well utilized**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	9.1	9.1	9.1
	2	15	27.3	27.3	36.4
	3	9	16.4	16.4	52.7
	4	21	38.2	38.2	90.9
	5	5	9.1	9.1	100.0
	Total	55	100.0	100.0	

**VFM 40. Government gets assured of VFM if costs incurred by Universities are reasonable.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	5.5	5.5	5.5
	2	4	7.3	7.3	12.7
	3	16	29.1	29.1	41.8
	4	29	52.7	52.7	94.5
	5	3	5.5	5.5	100.0
	Total	55	100.0	100.0	

**VFM 41. The commitment by the management of the University in providing VFM in its program is weak.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	5.5	5.5	5.5
	2	13	23.6	23.6	29.1
	3	10	18.2	18.2	47.3
	4	21	38.2	38.2	85.5
	5	8	14.5	14.5	100.0
	Total	55	100.0	100.0	