



**DETERMINANTS OF INTERNAL CONTROL SYSTEM: A STUDY
ON SELECTED COMMERCIAL BANKS IN ETHIOPIA**

MSC THESIS

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WOLKITE UNIVERSITY, WOLKITE, ETHIOPIA

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**DETERMINANTS OF INTERNAL CONTROL SYSTEM: A STUDY
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**THESIS SUBMITTED TO THE DEPARTMENT OF
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STATEMENT OF DECLARATION

I hereby declare that this thesis entitled **“Determinants Of Internal Control System: A Study On Selected Commercial Banks In Ethiopia”**, has been carried out by me under the guidance and supervision of **Cherent Bereda (Ph.D.)** and Mr. **Muluaem H/Michael (MSc)** and submitted by me for the award of the degree of Master of Science in accounting and finance of Wolkite University.

The thesis is original and has not been submitted for the award of any Degree of diploma any University. It is offered for the partial fulfillment of the degree of Masters of in accounting and finance.

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As members of the Board of Examiners of the final Master's degree open defense, we certify that we have read and evaluated this thesis prepared by Ms. **Lakech Erchafo Madebo** thesis entitled “**Determinants Of Internal Control System: A Study On Selected Commercial Banks In Ethiopia**” and We recommend that this document were accepted as fulfilling the thesis requirement for the degree of Master of Science in accounting and finance.

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ABBREVIATIONS

AAERs-----	Accounting and Auditing Enforcement Releases
CBE-----	Commercial Banks of Ethiopia
CEO-----	Chief Executive Officer
CMA-----	Capital Market Authority
COBIT-----	Control Objectives for Information Technology
COSO-----	Committee of Sponsoring Organization
CPA-----	Certified Public Accountant
FCPA-----	Foreign Corrupt Practice Act
GAAP-----	Generally Accepted Accounting Principle
ICS-----	Internal Control Systems
IFRS-----	International Financial Reporting Standards
IT-----	Information Technology
MBO-----	Management by Objectives
NBE-----	National Bank of Ethiopia
OLS-----	Ordinary Least Square
SBA-----	System Based Audits
SOX-----	Sarbanes Oxley Act
VIF-----	Variance Inflation Factor

Abstract

Internal controlling systems are the mechanisms, rules, and procedures implemented by a company to ensure the integrity of financial and accounting information, promote accountability, and prevent fraud. The purpose of this study is to examine determinants of effective internal control system in selected commercial banks in Ethiopia. The descriptive research design was used and the mixed research approach was used to collect data; while, questionnaires used to collect primary data. The survey was taken commercial banks through random sampling techniques 120 employees for empirical examination. The data was analyzed by using statistical package SPSS version 21 and descriptive and econometrics tool OLS; All independent variables (POER, WOC, IND, GOR, WIECM and WEDOS) were 59% explained the dependent variables (ICS). The study revealed that there existed significant and positive relationships between the Remuneration of internal control staff ($\beta = 0.397$ prob. = 0.000), organizational structure ($\beta = 0.429$ prob. = 0.000) and independency of IC staffs ($\beta = 0.130$ prob. = 0.018) with internal control system. On the other hand, enforcement control ($\beta = -0.379$ prob. = 0.000) have a negative and statistically significant relationship with internal control system. However, workers competency ($\beta = 0.042$ prob. = 0.624), Early report presentation ($\beta = -0.049$ prob. = 0.564) have positive relation but not significant effect on internal control system. Based on the findings of the study the banks management emphasize on the role of remuneration internal control staff because of a key to controlling system. This study provides useful information to practitioners and academics who are interested in identifying the determinants of internal control system.

Keywords: *Internal control system, Remuneration, organizational structure, enforcement control, work competency, Early report presentation*

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

A system of effective internal control is an essential element of an organization's supervision (banks inclusive) and an institution planned for its protected and quality operations. In the endeavor to ensure efficient and effective operation of its activities, the management of any organization designs internal control procedures to allocate, control and ensure efficient utilization of resources, in order to achieve the overall corporate goals (ISA 400, 2005). Such procedures include among others, the Internal Control Systems (ICS's). ICS's have long been advocated as a mechanism for establishing high quality financial reporting, and firms have voluntarily used them for this purpose, as they give confirmation on the reliability of the accounting and financial statements besides safeguarding assets of the firm.

A system of strong internal controls can aid to insure convinced that the goals and objectives of bank will be met, that it will attain long-term targets and sustain trustworthy financial and managerial reporting. In accounting and auditing, internal control is defined as a process affected by an organization's structure, work and authority flows, people and management information systems, designed to help the organization accomplish specific goals or objectives. It plays an important role in preventing and detecting fraud and protecting the organization's resources, both physical and intangible things like reputation or intellectual property such as trademarks. This is achieved through proper authorization controls and documentation. At the organizational level, internal control objectives relate to the reliability of financial reporting, timely feedback on the achievement of operational or strategic goals, and compliance with laws and regulations (COSO, 2011).

Such a system can also help to ensure that the banks will comply with laws and regulations as well as policies, plans, internal rules and procedures, and reduce the risk of unexpected losses and damage to the organization's reputation.

At the specific transaction level, internal control refers to the actions taken to achieve a specific objective such as how to ensure the organization's payments to third parties are for valid services rendered (Cook, 1979)

In spite of the use of ICS's, which advocate for modern accounting systems and methods, the size of modern business, its complexity and widespread structural organization combined with human weaknesses, exposes organizations to financial losses (Hylas *et al* ,1982). A great amount of money and goods can be lost through fraudulent actions of dishonest employees, and unintentional errors in the transformation and transfer of financial information used for appropriate decision making.

The findings of the Tread way Commission Report of 1987 in the United States (USA) confirmed absence of, or weak, internal controls as the primary cause of many cases of fraudulent company financial reporting. In response to several high-profile financial frauds COSO (1992) issued a report providing a foundation for assessing internal control effectiveness. Ever since, several waves of accounting scandals have led to regulatory requirements for managers and auditors to report on internal control effectiveness. Most recently, the Sarbanes Oxley Act (SOX) internal control provisions have fueled the ongoing debate among regulators and practitioners about the effectiveness of this type of regulation in improving financial reporting quality given the subsequent financial crisis. In a speech delivered at the U.S. Chamber of Commerce Global Capital Markets Summit, (James Turley 2008), Chairman and CEO of Ernst & Young, called for “a global debate about what management should be saying about its controls, (and) what auditors should be saying about them, if anything.”

It was observed from investigation that some banks are engaged in the falsification of their status reports in order to enhance their share market value (Osioma and Enahoro, 2006). With this scenario, one begins to imagine what is happening to the internal control system of those banks. Could it be that the internal control officers of the banks are yielding to the demand of management for the perpetration of such acts or the internal control system is generally ineffective? Previous studies such as Smith and Jacknes (2003), and Kudinz (2009), have indicated some determinants of effective internal control system as presentation of early report, respect for authority, willingness to effect changes, lack of workers collusion, workers

competence, independence of internal control staff, management observance of control, good remuneration of internal control staff, cost of instituting internal control measures, willingness to enforce controls, control measures for unusual transactions, and well-designed organizational structure.

Therefore this study is focusing on the determinants of effective internal control system in selected Ethiopian commercial banks.

1.2. Statement of Problem

Internal control system generally serves as a first line of defense for companies in safeguarding assets and preventing and detecting errors and fraud. Internal control is defined as a process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding to achieve objectives of effectiveness and efficiency of operations; reliability of financial reporting; and compliance with laws and regulation (Berra, 2010). This means that an organization that put in place an appropriate and adequate system of accounting controls is likely to perform better financial performance. As puts it, a business's internal control function can significantly affect the operations of the enterprise and may have an impact on the ability of the entity to remain a going-concern.

Internal control system is the whole system of company operations, financial or otherwise established by management, in order to secure, as far as possible, the accuracy and reliability of records, run the business in an orderly manner and safeguard the company's assets, its objective being the prevention or early detection of fraud and errors (Aguolu, 2002). Henshaw and Barban (2000) classified internal control into two broad forms. These are accounting controls and administrative controls. Accounting controls are those measures having to do with the reliance on the accounting records and financial statements. They include internal audit and internal checks. Internal audit is an independent appraisal activity within the bank for the review of accounts, financial and other operations as a basis for service to management. Osisoma and Enahoro (2006) posit that the job of the internal auditor is to investigate and appraise the system of internal control and the efficiency with in which the various units and branches of the bank are carrying out their assigned functions.

Smith and Jacknes (2003) described administrative controls as those internal control measures that have no bearing on financial records and statements. Kiabel (2002) posits that administrative controls are established to provide operational efficiency and adherence to prescribed policies in all departments and branches of the organization. They include: quality control, operation scheduling, budgeting control, and annual plan control. Kudinz (1998) noted that the reasons for internal control in any organization are first to safeguard resources against waste, fraud and inefficiency second to promote accuracy and reliability in accounting and operating data, and third to encourage and measure compliance organization's policy.

Related literature revealed that the internal control measures adopted in the banking industry are not effective enough in minimizing or eradicating accounting irregularities. The effectiveness of the system is hindered by several factors among, which are: many of the bank workers have no proper accounting and finance background; hence they are incompetence and are prone to making wrong accounting entries. The outcome of this is negligence on the part of the worker in the performance of assigned duties; long duration of the working hours in the banking industry makes bank workers weary thereby committing errors in accounting entries and records; some bank workers may collide with each other to be engaged in fraudulent acts and renders the segregation of duties irrelevant (Okoh and Unugbro, 2003). To maintain and ensure their job security, Welkazi (2004) asserted that auditors dance to management music, and management are reluctant to enforce controls relating to their personal activities, hence they indulge themselves in various forms of irregularities, abuse of authority, reluctance to effect changes when necessary in the internal control system, and frequent alterations in the internal control system, which can lead to a total breakdown of the system (Labaran, 2011; Kiabel and Akenbor, 2008).

It was observed from investigation that some banks are engaged in the falsification of their status reports in order to enhance their share market value (Osioma and Enahoro, 2006). With this scenario, one begins to image what is happening to the internal control system of those banks. Could it be that the internal control officers of the banks are yielding to the demand of management for the perpetration of such acts or the internal control system is generally ineffective Previous studies such as Smith and Jacknes (2003), and Kudinz (2009), have indicated some determinants of effective internal control system as presentation of early

report, respect for authority, willingness to effect changes, lack of workers collusion, workers competence, independence of internal control staff, management observance of control, good remuneration of internal control staff, cost of instituting internal control measures, willingness to enforce controls, control measures for unusual transactions, and well-designed organizational structure.

Therefore it is upon this premise that this study is consummated to determine the impact of presentation of early report, workers competence, independence of internal control staff, remuneration of internal control staff, willingness to enforce controls, and well-designed organizational structure. A gap in the literature motivated this study as the study tray to answer the research question, what is the determinant effective internal control system in selected Ethiopian commercial banks.

1.3. Research Questions

- 1.** Is presentation of early report affects effectiveness of internal control system of commercial banks of Ethiopia?
- 2.** Will the workers competency affects the effectiveness of internal control system of commercial banks of Ethiopia?
- 3.** Is the independency of internal control staff affects the effectiveness of internal control system of commercial banks of Ethiopia?
- 4.** Is the good remuneration affects the effectiveness of internal control system of commercial banks of Ethiopia?
- 5.** Is the willingness to enforce controls affects the effectiveness of internal control system of commercial banks of Ethiopia?
- 6.** Is well designed organizational structure affects the effectiveness of internal control system in commercial banks of Ethiopia?

1.4. Objectives of the Study

1.4.1. General Objective

The general objective of the study is to examine determinants of effective internal control system in selected Ethiopian commercial banks.

1.4.2. Specific Objectives

The specific objective of the study includes:

- To determine the impact of presentation of early report on effectiveness of Internal Control of commercial bank of Ethiopia
- To investigate workers competence on effectiveness of Internal Control of commercial bank of Ethiopia
- To examine independence of internal control staff on effectiveness of Internal Control of commercial bank of Ethiopia
- To analyze good remuneration of internal control staff on effectiveness of Internal Control of commercial bank of Ethiopia
- To Examine the willingness to enforce controls on effectiveness of Internal Control of commercial bank of Ethiopia
- To investigate the impact of well-designed organizational structure on effectiveness of Internal Control of commercial bank of Ethiopia.

1.5. Research Hypothesis

In order to achieve the objectives of the study, a number of hypotheses were tested regarding the determinants of effective internal control system in Ethiopian commercial banks based on different empirical research and theoretical reviews. These testable hypotheses can be formulated as follows.

- ✓ **Hypothesis1:** Presentation of early report has a positive significant effect on Internal Control of commercial banks of Ethiopia
- ✓ **Hypothesis2:** Workers competency has a positive significant effect on Internal Control of commercial banks of Ethiopia

- ✓ **Hypothesis3:** Independence of internal control staff has a positive effect on Internal Control of commercial banks of Ethiopia
- ✓ **Hypothesis4:** Good remuneration of internal control staff has a positive significant effect on Internal Control of commercial banks of Ethiopia
- ✓ **Hypothesis 5:** Willingness to enforce controls has a positive significant effect on Internal Control of commercial banks of Ethiopia
- ✓ **Hypothesis 6:** Well-designed organizational structure has a positive significant effect on Internal Control of commercial banks of Ethiopia

1.6. Significance of the Study

Internal controls are a key to the success of any organization, irrespective of its size, as they help the organization attain its objectives. Sufficient, reliable and accurate accounting information can be elicited from an organization that has a strong ICS, to allow reliable financial reporting, and good labor relations.

In addition to assisting management in effectively carrying out its responsibilities, Internal Controls also help external auditors in reducing their audit work and subsequently, saving on time and costs. The ICS's allow the auditor to reduce the need for routine, mechanical verification of bookkeeping accuracy, permitting substitution of a less time-consuming approach that involves reasoning and judgment and stresses such activities as reviews, analysis evaluation and statistical sampling.

Management is likely to benefit through highlighting of weaknesses of the existing system, and possibly urging them to adopt the recommendations, which will enhance their control, monitoring function and financial planning. With employees sensitized to the importance of the ICS, they will appreciate the importance of ICS's, hence creating good labor relation, enhancing smooth flow of work.

This study can also be used as a basis of further researches and also in academics in the area of effective internal control system.

1.7. Scope of the research

The study covers all commercial banks employee that found in Wolkite town. The target population of the study is all branches of banks found in Wolkite town and the selected employee are only who had been working in the bank at least one year were considered.

In this study, the researcher has used internal control system (ICS) as dependent variable and Presentation of early report (POER), Willingness to effect changes (WIEC), Workers competence (WOC), Independence of internal control staff (IND), Good remuneration of internal control staff (GOR), Willingness to enforce control measures (WIECM) and Well-designed organizational structure (WEDOS) as independent variable and measure using 5-likert scale.

The study utilizes primary data collected from 11 commercial banks branch that's found in Wolkite city. The researcher takes questioner to collect specific information from the respondent.

1.8. Structure of the thesis

This thesis consists of five chapters. The first chapter was the introduction of the thesis and it gives information on the background of the study, statement of the problem, objectives, research significance of the study. The second chapter contains extensive literature review both in theoretical and empirical studies. Chapter three discussed the research design and methodology adopted in this study and data interpretations are presented in chapter four. The final chapter (chapter five) presents the conclusion and recommendation of the study and further research suggestions.

CHAPTER TWO

2. LITERATURE REVIEW

2.1. Theoretical Review

The many financial scandals that have shaken financial markets and investors worldwide have certainly contributed to the recognition of the key role of the Internal Control System (ICS) in the governance of firms. Theories have been documented, and they have formed the basis of the design of ICS. According to the agency and stewardship theories, the ICS contributes to the protection of investors' interests both by promoting and giving assurance on the reliability of financial reporting, and by focusing the boards' attention to the timely identification, evaluation and management of risks that may compromise the attainment of corporate goals. The social theory postulates need to design ICS's in recognition of the worker as having social needs that must be met, alongside the firms' goals.

In response to the major fraud in the financial market, the SOX Act created way where, institutions like COSO responded by designed ICS framework, from the beginning of the 1990's. The centrality of internal control systems in promoting the achievement of objectives concerning the effectiveness and efficiency of operations, the reliability of financial reporting and the compliance with laws and regulations (COSO, 1992; 2004) was emphasized, as discussed later.

The main theoretical perspectives that have the main determinants of effective internal control system of any institution especially in banks are the agency theory transactions cost economics, stakeholder's theory and stewardship theory.

2.1.1. Attribution Theory

Attribution theory is a social psychology theory that explores how people interpret events and behaviors and how they ascribe causes to the events and behaviors. According to Schroth and Shah (2000), studies using attribution theory examine the use of information in the social environment to explain events and behaviors. Reffett (2007) asserts that when evaluators believe 12 comparable persons would have acted differently in a given circumstance, they (evaluators) tend to attribute responsibility for an outcome to the person. On the other hand,

when evaluators believe comparable persons would have acted similarly, the evaluators tend to attribute responsibility for the outcome to the situation.

According to Wilks and Zimbelman (2004), the first case refers to internal or dispositional attributions while the second one refers to external or situational attributions. Earlier literature shows that people are inclined to attribute others behavior to dispositional tendencies and to attribute their own behavior to situational circumstances (Wilks&Zimbelman, 2004; Schroth& Shah, 2000). Often, this is when the observed behavior is negative. Consequently, evaluators are expected to infer the failure to detect internal control on revenue generation as a dispositional tendency on the auditors' part which concludes that auditors are negligent. Bonner et al. (1998) found that auditors are more likely to be sued when they fail to detect common misappropriations that would result to decreased revenues, and the evaluators believe that the fraud could have been detected by other auditors.

The auditors' accountability for detecting fraud is extended by Reffetts (2007) study which predicted that auditors are more likely to be held accountable by evaluators when the auditors fail to detect fraud after they had identified the fraud occurrence as a fraud risk. The result of Reffetts study shows an increase in auditors liability when an audit fails, after the auditors had identified the perpetrated fraud as a fraud risk and performed procedures to investigate the identified fraud risk. Attribution theory thus advocates for auditors to report on the effectiveness of firm's internal control. Auditors are therefore expected to gain a better understanding of the internal controls in 13 places, assess the design and implementation of the internal controls, and test the operating effectiveness of the internal controls. This is deemed necessary for the auditors' reliance and possibly scaling back of other substantive audit procedures for the required revenue generation.

According to Bonner et al. (1998), evaluators can use the audit processes as a basis to determine negligence if auditors fail to detect internal control related fraud that may occur. The attribution theory suggests that when fraud occurs, identified parties should be held accountable and auditors, being the "public watch dogs" are most likely to be held accountable if evaluators determine substandard audit services were provided (Reffett, 2007).

2.1.2. Reliability Theory

Reliability theory simply describes the probability of a system completing its expected function during an interval of time (Gavrilov & Gavrilova, 2001). It was originally a tool used to help nineteenth century maritime insurance and life insurance companies in computing profitable rates to charge their customers. According to the reliability theory, an internal control system comprises of components that are interrelated and each for component, there needs to be a defined measure of success. As such, the state of a component is determined by whether the component is successful or not successful. The reliability of a component is defined as the probability of the component being found in the success state. In addition, the reliability of the entire internal control system is a binary combination with two possible values, success and failure. This study considered the part of the reliability theory which relates the internal control system to component reliabilities.

The tractability of reliability theory to the evaluation and design of internal control systems have appeared in the professional literature but no applications have been reported that draw upon the substantial power of the theory of reliability (Kinney, 2000). The two potential users of the Reliability theory is the external auditor and organization management. Kinney (2000) states that; during the external audit, evidence is gathered to support a professional opinion.

Internal control systems have a primary purpose of assessment and control of risks; that a material error was not to be prevented or detected on a timely basis by the system leaving to losses. Weak internal control systems result in more substantive work and hence greater cost. According to Gavrilov and Gavrilova (2001), the determination of the "weakness" of any internal control system is primarily judgmental. Upon the formulation of the process and system reliability estimates, comparison with data from the organizations past performances or other firms may provide a more solid basis for judgment of the impact of an internal control system on the firms' income risk and hence provide for more rational allocation of the auditor's time and effort. Messier Jr. and Austen (2000) state that one of the primary advantages of the reliability theory is its close relationship to the auditor's needs regarding understanding the internal control system and control risk assessment. According to Stratton (2007), recent developments have increased the value to management of objective methodologies for the evaluation of internal control systems. Firm managers are therefore

required to assure the accuracy of these systems. Stratton (2007) also adds that the process of evaluation of the internal control system by both management and external auditors is judgmental in nature. However, the few attempts at modeling internal control systems have not been implemented by firms due to the lack of realism, difficulty of modeling behavioral systems, lack of cost effectiveness, and lack of understanding by practitioners.

2.1.3. Agency Theory

According to the agency theory, a firm consists of a nexus of contracts between the owners of economic resources (the principals) and managers (the agents) who are charged with using and controlling those resources (Jensen & Meckling, 1976). The theory posits that agents have more information than principals and that this information asymmetry adversely affects the principal's ability to monitor whether or not their interests are being properly served by agents. As such, the theory describes firms as necessary structures to maintain contracts, and through firms, it is possible to exercise control which minimizes opportunistic behavior of agents (Jensen & Meckling, 1976).

According to the theory, in order to harmonize the interests of the agent and the principal, a comprehensive contract is written to address the interest of both the agent and the principal. The agent-principal relationship is strengthened more by the principal employing an expert and systems (auditors and control systems) to monitor the agent (Jussi& Petri, 2004). Further the theory recognizes that any incomplete information about the relationship, interests or work performance of the agent described could be adverse and a moral hazard. Moral hazard and adverse selection impact on the output of the agent in two ways; not possessing the requisite knowledge about what should be done and not doing exactly what the agent is appointed to do.

The agency theory therefore works on the assumption that principals and agents act rationally and use contracting to maximize their wealth (Jensen & Meckling, 1976). This theory is applicable to this study simply because internal control is one of many mechanisms used in business to address the agency problem by reducing agency costs that affects the overall performance of the relationship as well as the benefits of the principal (Abdel-Khalik, 1993). Internal control enhances the provision of additional information to the principal (shareholder)

about the behavior of the agent (management) reduces information asymmetry and lowers investor risk and low revenue.

2.2. Empirical Review

Research on evaluation of ICS's show that the regulatory environment largely determines the effectiveness of ICS's, as established by findings (Berreta et al.2012), on firms listed in stock exchanges in London, Paris, Frankfurt and Milan. Locally, listed firms are expected to comply with regulations on the composition of the audit committees. Locally, the Capital Markets Authority demanded that all quoted companies should have their internal audit reporting to audit committees, to deter irregularities and fraud.

ICS cannot be directly observed by investors in order to appreciate its effectiveness because it is composed by internal managerial mechanisms, activities and processes put in place within the organization (Deumes & Knechel, 2008). Thus, investors must rely on management discretionary disclosure in order to get specific information on its design and implementation. For this reason, both regulation and codes of corporate governance across the world have called for increased ICS disclosure (Directive 2003/51/EU "Modernization"; Combined Code - discussion draft – FRC, 2009).

While focusing on control environment (Abbott, et.al, 2010) investigated whether audit committee activity and independent is inversely related to fraudulent financial statements. Using 156 firms subject to SEC Accounting and Auditing Enforcement Releases (AAERs) between 1980 and 1986. In the study Abbott (2000) substituted the variable audit committee presence used in earlier studies with audit committee activity and independence, since the earlier studies reported mixed results about the association of audit committee and likely hood of fraud. The result of the study indicated that firms with independent directors and with the minimum activity level are less likely to be associated with fraudulent financial statements

Case studies on internal controls in Belgium illustrate the importance of the control environment when studying internal audit practice. Sovens and De Beelde (2006) found that certain control environment characteristics like tone-at-the top, level of risk and control awareness extend to which responsibilities related to risk management and external controls

are clearly defined and communicated and are significantly related to the role of the internal audit function and fraud detection within an organization.

Using the analytical approach and focusing on control activities and monitoring, Berra (2010) investigate the effects of penalties and other internal controls on employees' propensity to be fraudulent. Data was collected from both managers and non-managerial employees. The result showed that the presence of control activities separation of duties increases the cost of committing fraud. Thus the benefit from committing fraud has to outweigh the cost in an environment of segregated duties for an employee to commit fraud. Further it was established that segregation of duties is at least cost fraud deterrent for non-managerial employees, but for managerial employee, maximum penalties are the least cost fraud disincentives. The results suggest the effectiveness of preventive controls (control activities) such as segregation of duties is dependent on the detective controls (monitoring).

Internal control systems is a topical issue following global fraudulent financial reporting and accounting scandals worldwide. As such a more proactive preventive approach to the problem requires a critical evaluation of existing internal control structures in organization to determine their capacity to ensure that the organization's activities are carried out in accordance with established goals, policies and procedures. Amudo and Inenga (2009) carried out an evaluation of internal control systems on the Regional Member Countries (RMCs) of the Africa Development Bank Group (AFDB) focusing on Uganda in East Africa. The study established that some control components of effective internal control systems are lacking in these projects which renders the current control structures in effective. The study recommended on improvement of the existing internal control systems in the project.

Adrian (2005) in his CPA publication believes internal controls, auditing policies and a tough stance can help deter fraud. He believes the first line of defense against fraud is a strong system of Internal Controls, which can be achieved through employee awareness policy and whistle blowing policy. All published guidance point to management as the individuals responsible for preventing fraud, with ICS's used as the main tools.

While corporate governance best practices ask for disclosure about the characteristics of the ICS, they do not detail what management should disclose (free hand, high level approach).

Under these circumstances management has wide discretion in deciding the extent and contents of the narratives of ICS disclosure. Previous research on the relationship between corporate governance and disclosure is based on agency theory (Jensen &Meckling, 1976) and Williamson (1983). They provided the framework linking board monitoring and disclosure.

Berretta et al (2008) noted ICS disclosure in compliance with the regulatory environment determines the strength of ICS's. Empirical evidence shows that the ability of the board to play its monitoring role is related with the information disclosed to the market (Chen &Jaggi, 2000; Eng&Mak, 2003) and with the functioning of the ICS (Xie et al., 2003; Zhang et al., 2007), where the regulatory framework demands. On the one side, in an enforced setting, management is required to issue a report on the ICS. As investors value the costs they sustain to monitor management when pricing their claims (Jensen &Meckling 1976), the incentives for management to disclose are higher when the other monitoring mechanisms (such as the board of directors) are weaker and thus the overall agency problem is higher (Leftwich et al., 1981; Eng&Mak, 2003; Gul& Leung, 2004). Thus, management has incentives to communicate more information on the characteristics of the ICS in order to lower monitoring costs for investors and to inform them on the effectiveness of the ICS.

A study was conducted based on four European countries, characterized by different institutional settings. Samples comprised 160 European firms listed on the London, Paris, Frankfurt and Milan stock exchanges during a three-year period (2003 – 2005). Whilst in Germany and France disclosure on the ICS was enforced by some provisions contained in the respective Commercial Codes, in Italy and the UK disclosure was simply recommended by national Codes of Corporate Governance.

Other researchers have made detailed researches on the relationships between an organization and its financial control systems. They used the agency, stewardship and social theories. Cook & Kaplan (1968) conducted studies that focused on aspects of controls and how they relate to performance reporting, organizational structure, behavior and the external auditors' work. Their findings gave high correlation. Ouchi (1981) studied the relationship between the organizational structure and organizational control. Based on 78 retail departmental stores, he conceded that output control was highly dependent upon the organization structure.

Bruns & Waterhouse (1975), conducted a survey of 25 companies to explore the interaction between an organization structure and budgets. The argument was put that budget related behavior was contingent upon these factors. They argued that budget related behavior was dependent on centralization, structuring and autonomy. Hayes (1977) made a survey of 103 companies to assess the effectiveness of departments in relation to internal, environmental and inter-dependency factors. He concluded that controllability and responsibility are different across different departments, due to differences in technology and environment. Haylas& Ashton (1982) sought to provide evidence on the effectiveness of particular audit techniques in detecting errors that affect financial statements. The results of the study suggested that intentional errors are concentrated in relatively few audit areas, depending on the industry. Majority of the errors either over or understate profit.

Cook (1968) studied the attitude of managers towards control report. In a related study by Dew & Gee (1975), the results of the two studies were that the degree of reporting frequency determined the extent to which management would use the reports.

The National Audit Office of the United Kingdom, in collaboration with the Overseas Development Administration, in its Manual entitled “A Guide to Certification Audit “emphasizes the evaluation of internal control procedures during Systems Based Audit (SBA). In the United States of America, the introduction of the Foreign Corrupt Practices

Act of 1977 (FCPA) requires the corporate management to maintain a system of Internal Accounting Controls, sufficient to provide reasonable assurances for the proper execution of transactions and effecting accountability.

The COSO framework identifies specific elements as parameters to any ICS as discussed below. However, this framework may only be appropriate to large organizations due to cost and operational complexity. Small firms may not employ all the elements, yet the systems could still be effective, because of the personal involvement of the management in the firm. The COSO framework did not recognize and capture the delicate balance between formal and informal controls in small firms. COSO also failed to recognize the importance of Information Technology (IT) as a major control component.

Control Objectives for Information and Related Technology (COBIT 1996, 1998, 2000, 2005 & 2007) recognizes the IT importance and its omission in the COSO research as a control component. COBIT identifies IT resources as a source of information, and they include, people, application systems, technology, facilities and data. These are then grouped into domains (planning and organization) with processes (acquisition and implementation, delivery, support and monitoring), so using the three theories stated above.

Studies conducted in Kenya by Salih (1983), attributed the performance of Ethiopia airline, to strong internal controls. Essajjee (1993) attributed the then pending collapse of Nyayo Bus Service Corporation to inadequate controls.

With the CMA (capital markets authority) just recently enforcing use of audit committees to enhance IC effectiveness, and for lack of regulatory requirements on ICS's of local public institutions, the research will largely use the COSO framework, which is developed from the agency, stewardship and social control theories.

2.2.1. Elements of Internal Controls

COSO IC – Integrated framework, 1992 (Knechel, 2007) gives specific components of the ICS as below:

Control environment- the essence of an effectively controlled organization lies in the attitude of its management (Aarens et al, 1997). The control environment consists of actions, policies and procedures that reflect management attitude about the control of the entity. This touches on integrity and ethical values, commitment to competence, Board of Directors or audit committee participation, management's philosophy and operating style, organization structure, and assignment of authority and responsibility and Human Resource practices.

Risk assessment – Management assesses, identifies and analyses risks relevant to the financial reporting in conformity to GAAP. This becomes a point of designing and operating ICS's to minimize errors and irregularities. The auditor assesses risks to decide evidence needed for audit.

Control activities – are policies and procedures, in addition to those included in the other four components, that help ensure necessary actions are taken to address risks in the achievement

of the entity's objective eg segregation of duties (authorization, custody, operations and documents, electronic data processing), proper authorization, proper documentation and records, physical control over assets and records and independent checks on performance.

Information and communication – readable and readily understood information is important for the dissemination of instructions downwards, through all the internal channels of communication. The flow of information should be adequate, sufficiently detailed and explicit, accurate and up to date in an upward direction, as part of a routine management information system (Woolf, 1982).

Monitoring - involves ongoing/continuous or periodic assessment of the quality of ICS performance by management to see if ICS are understood, implemented and need for revision, external and internal audit reports, financial statements, regulatory reports can be used. It can be achieved through use of internal audits and audit committees.

Organization and Behavioral Controls

The organization structure is determined by: size and complexity of the entity, clarity of lines of authority and responsibility; the level at which policies and procedures are established; adherence to these policies and procedures; adequacy of supervision and monitoring of decentralized operations (Hayes et al, 2005).

The organizational control, through variables such as culture, style of management, directional control, control strategic human resource management, organizational structure, together with the individual and social control, tends to guide the individual and collective behavior towards achieving the business goals (Ouchi, 1981). The culture and style of leadership are the most important variables of organizational control, because they affect the workings of organizational control, the individual and social controls.

Segregation of Duties

An important character of an effective ICS is a separation of functional responsibilities (Louwers et al, 2008). According to him, four types of functional responsibilities should be performed by the different departments. The initiation, authorization, execution, and recording of any transaction are executed by different officers.

Division of work, with no one person processing and recording a complete transaction reduces the risk of internal manipulation or error, as it increases checking. Where there are incompatible responsibilities, a combination of responsibilities that place a person alone in a position to create and conceal errors, fraud or misstatements in his normal job, duties should be avoided such that no one person can control two or more of these responsibilities. (Hayes, 2005), concedes that segregation of duties prevents persons with access to readily realizable assets from being able to adjust the relevant records, hence controlling assets. In a computerized environment, the operations responsibility, record keeping and the information technology duties should be separate. I.e. the programmer, computer operator, librarian and data reviewer duties should be separated (Hayes, 2005).

Authorization to Execute Transactions

This duty belongs to people who have authority and responsibility for initiating or approving transactions. The authorization may be general, based on a class of transactions or it may be specific, on a specified transaction. These people initiate and approve transactions subject to subject matter limit and as prescribed by the management policy (Louwers et al, 2008). Authorized transactions are those deemed to have been sanctioned by the authorized officials, with clearly defined limits of authority for the various transactions.

Transaction Records

To ensure all transactions are recorded with accuracy and completeness, the management design forms and procedures of recording such transactions. An entity should have controls that ensure that each transaction that occurs in an entity's accounting system is properly authorized, and the entity should design documents and records so that all relevant information is captured in the accounting system (Assmund et al, 2006). Systematically designed and classified information, serves as a basis for summarization and identification of the nature of the item to be recorded. This also allows the checking of arithmetical accuracy (Ricchiute, 2006).

Pre numbered documents should be used, having been prepared at the time a transaction takes place, simple enough to be clearly understood, designed to meet the needs of the accounting and record keeping function, in both manual and computerized environment. In a

computerized environment, this calls for control over file revision, storage and updates and maintaining back up files like son-father-grandfather documents (Knechel et al, 2007).

Flow of Information

A systems flowchart is a diagrammatic – symbolic representation of a system or a series of procedures, given in sequence. It shows the sequence of procedures, division of responsibilities, sources and distribution of documents, and types and location of accounting records and files. Many CPA firms consider systems flowcharts more effective than questionnaires and narrative descriptions in documenting their understanding of a client's accounting information system (Whittington, 2010). In a computerized accounting environment, a flowchart is a diagram representative of the entity's accounting system – it can be a document, systems, program flow chart, showing the flow of documents, the processing steps and operations performed respectively (Aasmund et al, 2006).

Arithmetic and Accounting Accuracy

Recording of transactions should be proper, accurate and arithmetically correct. The procedures here include checking arithmetic accuracy, checking totals, compiling reconciliations, writing up control accounts, trial balance and accounting for documents (Gray, 1999).

Data validation controls can be applied at various stages, depending on the entity's Information Technology capabilities, and are mainly concerned with accuracy assertion (Eilifsen, 2000). Errors can be identified at any point in the system.

Physical Controls

These procedures ensure the physical security of assets and records against theft, damage or loss besides security over unissued pre numbered documents, ledgers, journals and computers (Whittington et al, 2010). Physical access to such assets should thus be restricted to authorized personnel, by use of strong rooms, locks, and security against fire and vagaries' of weather (Hayes et al, 2005). This concerns the safety and custody of the company's assets and records through restricted accessibility (Gray, 1999). Restrictions to computer access can be effected by way of passwords (Louwers et al, 2008) and building of firewalls (Gray, 1999).

Custody of assets should be put in the custody of reliable persons. Close security being accorded highly valued items, especially those that are portable (Louwers et al, 2008). Separation of duties lowers the risk of disposal for personal gain and adjusting records to cover the theft (Ricchiute, 2006).

Performance reviews are independent checks on performance by a third party. They include review of actual performance vs. budgets and surprise checks of procedures. Periodic comparisons of accounting records and physical asset like stocktaking, and a review of functional or activity performance like review of reports on branch performance. (Hayes et al, 2005). Such duties entail making comparisons at regular intervals and taking appropriate action with respect to any differences (Louwers et al, 2008).

Sound Operating Routines and Procedures

These allow efficient running of the business organization in various area of operation. Specified procedures in the highly sensitive areas like procurement, preparation of payrolls, maintenance and safety of plant and equipment enhances the Controls in the organization. This can be achieved through use of descriptive words, diagrams or flowcharts.

Personnel

The internal control is only as effective as the personnel who implement and perform the controls (Aasmund et al, 2006). An entity with sound personnel policy for hiring, orienting, training, evaluating, counseling, promoting, compensating and taking remedial action on its work force is a direct function of possible errors, fraud and other irregularities (Ricchiute, 2006). It is vital to have adequate personnel, in terms of numbers, besides having the required competencies. This allows efficiency, accuracy and besides saving on time and cost. A motivated workforce will be less prone to high staff turnover, low likelihood of strikes, accidents and conflicts within the organization (Eilifse& Messier, 2000). Approximately 55 % of the errors detected by auditors resulted from personnel problems, insufficient accounting knowledge and judgment errors (Wright & Ashton, 1989). Careful selection and maintenance of employees determine the performance of an organization (Salih, 1983) (Chruden, 1980).

Control Environment

The subjective component of the Internal Control System is the control environment, which is considered the basis of internal control (COSO, 1992). It determines the degree of sensitivity of staff to the control needs. The human system affects the other components of the internal control system during the design and the implementation phases. It is characterized by the values, principles, ethical beliefs, fairness, equity, trust, honesty, which affect the behavior of the internal and external organization members (Cohen et al, 2004). The culture of control exerts a considerable influence on all the elements of the control system (Dittmeier, 2007). It further considers that the strategic background of internal control policies is determined not only by control culture, but also by style of Internal Control. The style of Internal Control could be construed at the same time as an "intellectual practice", which combines the ways to consider and to use variables of the internal control system (Pini, 2000).

The Auditor and Controls

This is done through internal audit and management controls. These are the controls exercised outside the day-to-day routine of the system. They include the overall supervisory duties, controls exercised by the management accountant and comparison with budgets, the internal audit function and any other special review procedures. Internal checks this is an important tool of ICS where the work of one employee is checked by another employee on daily basis.

Supervision

Close supervision of the firm's resources, for instance cash in the till and produce on the shelves should be conducted occasionally by the directors, or their nominee (Gray 1999). The responsibility of supervision should be clearly laid down and communicated to the person being supervised. The methods of supervision to be utilized depend on the cadre of workers in question. Senior workers can be supervised through Management by Objectives (MBO), while junior workers can be closely monitored physically.

Audit Committees

Audit committees are essential elements of the entity's top control environment, the full embodiment of the tone of the top. Since the committee is final (if not the only) authority over financial reporting, the chief executive and chief financial officers need to be competent. The

Sarbane-Oxley Act, Sec 407, 'Disclosure of audit Committee Financial Expert,' requires that an audit committee include at least one financial expert, the requirements for which focus largely on relevant experience (Ricchiute, 2006).

In summary, while benefits may accrue from the implementation of collaborative ICS, this will require both an effective and comprehensive change programmer, and the competences to support the change. Understanding and implementing ICS should bring about dramatic changes in work and business processes, positively resulting to efficiency, in quality service at the least cost.

This chapter has reviewed literature on the importance of various roles of ICS for good corporate governance. ICS are depicted both as monitor and agent of efficiency. The chapter also captures the relationship between corporate governance and ICS; agency, social and stewardship theories and the ICS, from local and international empirical studies.

However, despite the existence of certain possible inherent weaknesses that would exist in almost every system, however perfect in design, the corrective action taken for rectification by management and its periodic assessment through the Systems Control Evaluation method would enable the fulfillment of the principal objectives of establishing and effectively operating Internal Control Procedures.

There is, however, unanimity that the best organization's control systems are those that take into account both internal and external environment of the entity. It's important that design of IC not only be sourced from the internal management (agent) but also from the principal and other stakeholders, to cater for high level needs of the principal and the low level needs of the agent (covering agency theory). This will allow the ICS to capture both the economic and social aspects of any organization.

2.2.2. Control Environment

In internal control, the control environment sets the tone of the organization by influencing the control consciousness of its people (Whittington & Peny, 2001). Control environment is the foundation for all the other components of internal control. It comprises of factors like integrity and ethical values of personnel tasked with creating administering and monitoring the controls, commitments and competence of person performing assigned duties, board of

directors or audit committees, management philosophy and operating style and organizational structure. Many factors go into control environment but it is highly influenced by the effectiveness of the board of directors, the management and the audit division of the organization.

Internal auditors are essential to effective control environment since the effectiveness of these factors largely depends on their interaction with internal and external auditors. Control environment sets the tone of the organization, influencing the control consciousness of its people (Aldridge and Colbert, 1994). It reflects the attitude and policies of management in regard to importance of internal controls in revenue generation. Control environment is influenced by the history and the culture of organization and has an insidious influence on the way organization activities are structured. It does set a positive and supportive attitude toward internal control and conscientious management.

Effective internal control requires a strong control environment under which the components of systems are well implemented. The principal underlying good control and commitment to sound control compliance must be present so as to ensure healthy interactive control structure. Internal control must also be tailored to meet the needs of the individual business. The scandals of recent years emphasized the need to evaluate, scrutinize, and reformulate control systems of check and balances in order to guide corporate executives and persons in decision making. Therefore as much as organization would like to implement appropriately derived control measures, it must also consider the amount of money involved in implementing such measures.

The embezzlement of funds from public institutions or organizations, particularly in essential services or monopolistic public institutions is becoming more common such scandals have raised concerns about their internal control systems. According to AU section 309 control environment factors include integrity and ethical values, commitment to competence, board of directors or audit committee participation, management philosophy and operating style, organizational structure, assignment of authority and responsibility and human resource policies and practices, those responsible on financial management should obtain sufficient knowledge of the control environment to understand management and the board of directors' attitude, awareness, and actions concerning the control environment considering both the

substance of controls and their collective effect. There should be concentration on the substance of controls rather than their form, because controls may be established but not acted upon.

Risk Assessment

Risk assessment refers to the careful assessment of factors that affect the possibility of objectives of the organization not being achieved. It refers to identification and analysis of relevant risks associated with achieving the objectives of the organization (Karagiorgos et al 2009). They add that risk assessment is the process of identifying and analyzing management relevant risks to the preparation of financial statements that would be presented fairly in conformity with general accepted accounting principal.

Risk assessment may address how an entity considers the possibility of unrecorded transactions or identifies and analyzes significant estimated recorded in the financial statement. Risk relevant to reliable financial reporting also relates to specific events or transaction. Risk relevant to financial reporting include external and internal events and circumstance that may occur and adversely affect an entity's ability to initiate, record, process and report financial data consistent with the assertions of management in the financial statement. Risk can arise due to change in operating environment, new personnel, new or revamped information systems, rapid growth and per technology.

The purpose of risk assessment is to identify, analyze and manage risks that affect entity's objectives. It is about understanding the nature (i.e. causes, effects, likely hood) and significance of the risks faced by a firm. It is also about deciding on acceptable levels for these risks and designing cost-effective control and or resilience strategies (i.e. strategies to help manage the impact of risk on the firm). The aim is to keep the firm's risk at an acceptable level. Internal control is about understanding and controlling risk as well as acting as a monitoring function.

The primary purpose of internal control is to continuously evaluate whether a firm is meeting its objectives and ensure that the board managers and employees are well working to ensure the success of these strategies while keeping the level of risk at an acceptable level. In so doing a sound system of internal control should be able to reduce (but rarely eliminate) poor

judgment in the decision making, human error, the deliberate failure to follow control processes by employees and managers, and the impact of unexpected events. Internal control and risk management are close complements. A firm should use its risk management systems to help assess potential opportunities and threats to its objectives. There are also many different risk management tools with the same purpose as internal control, such as loss prevention, loss reduction and risk financing tools that may be used to ensure that the firm continues to meet its objectives.

Information and Communication System

According to Aldridge and Colbert (1994) internal control requires that all pertinent information be identified, captured, and communicated in a form and time frame that enable people to carry out their financial reporting responsibilities. Firms should adopt internal control and information systems that produce operational, financial and compliance-related information reports to make it possible to run and control business. Effective communication should occur in a broad sense with information flowing down across and up within all sections of the organization (Theofanis et al 2011). They are pervasive characteristics that affect all aspects of the internal control framework and enable people to carry out their responsibilities to run and control the organization. It is therefore essential that current accurate and appropriate information be made available on a timely basis to those who need it. This includes communication to external regulatory agencies and governing boards. Internally communication should be multi directional within the organization.

Control Activities

Control activities refer to policies, procedures and mechanisms put in place to ensure directives of the management are properly carried out (Aikins 2011). Appropriate and accurate documentation of policies and procedural guidelines helps to determine how the control activities are to be executed. An understanding should be obtained on how IT affects control activities that are relevant to planning. Some entities may view the IT control activities in terms of application controls and general controls. Application controls apply to the processing of individual application control helps ensure that transactions occurred are authorized and are completely and accurately recorded and processed, they include edit check

of input data, numerical sequence checks, and manual follow-up of exception reports. General controls commonly included controls over data center and network operations system software acquisition and maintenance; access security; and data application system acquisition development, and maintenance.

Monitoring and evaluation

Monitoring refers to the process of assessing the quality of internal control structure overtime. Since internal control is processes, it is usually accepted that they need to be adequately monitored in order to assess the quality and the effectiveness of the system's performance over time. By monitoring the organization gets provided with assurance that the findings of audits and other reviews are promptly determined (Theotanis et al 2011).

Amuda and Inenga (2009) add that monitoring of operations ensures effective functioning of internal control system. In addition monitoring can be achieved by regularly supervising and managing activities like monitoring of customers complaint and feedback and audit conducted directly by internal auditors. Monitoring of internal control is performed through application of both ongoing evaluations and separate evaluations. These evaluations ascertain whether other components of internal control continue to function as designed and intended. The evaluation facilitates identification of internal control deficiencies and communicates them to appropriate officials responsible for taking corrective action. A monitoring process must be capable of addressing the need for revisions in the design of controls based on changing risks at an acceptable level to ensure effective and efficient operations ongoing basis monitoring is a process of assessing risks linked to achieving operational objectives. The COSO model requires establishing a monitoring foundation consisting of procedures of evaluating risks. Monitoring activities include assessment of controls and reporting the results of the assessment together with any required corrective action. A key benefit of internal control monitoring is to provide assurance regarding effective and efficient operations and compliance with applicable laws and regulations.

2.3. Summary and Literature Gap

Internal control is an area of focus to the management and many stakeholders since it ensures safeguard of assets for revenues generation. Much of the literature review as much as covered has a wider coverage on wider perceptive. It also assumes that the internal control is in place and the issue is only on the operational aspects by the concerned. Measurability of the variables dealt with in literature are specific in the areas of study thereby does not give the overall feel of the effect of internal control in general capable of making generalization to all types of organizations. Internal control has been taken to be a concept of private sector rather than all types of organizations including in the public sector.

Public organizations have the duty to delivery on various aspects including the various stakeholders concerned. The reporting should be emphasized on the value for money audit which has even more insight on the internal control aspect. Therefore factors like presentation of early report, workers competency, independency of internal control staffs, good remuneration of internal control staffs, willingness to enforce controls, well-designed organizational structure would be considered as the study variables since most of this variables did not have a study made using them.

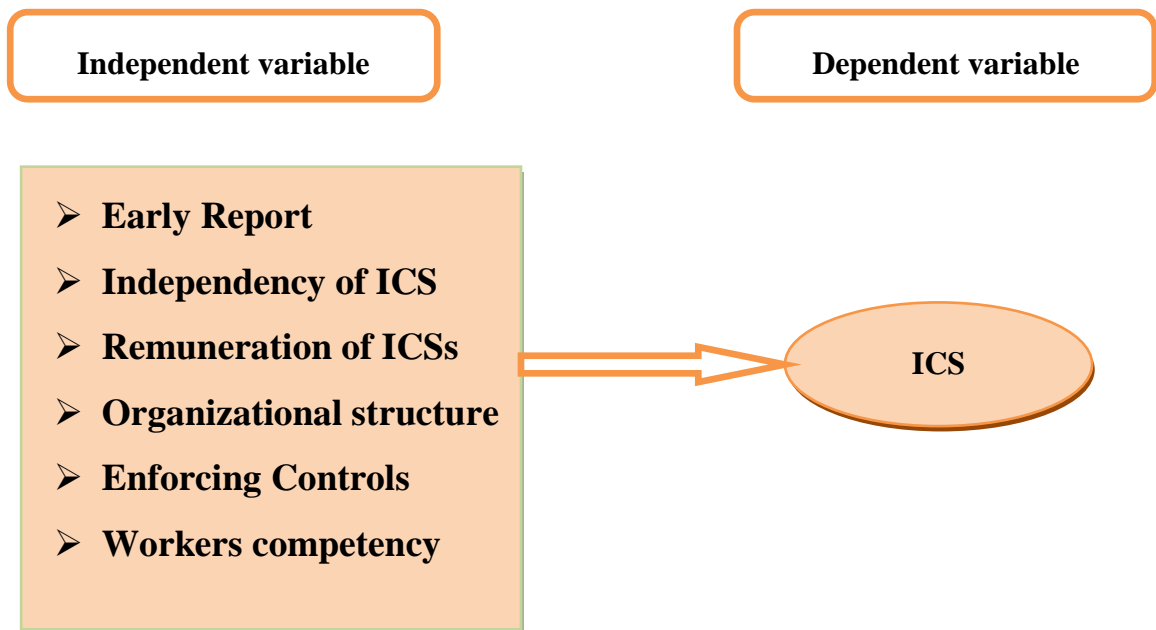
Most of the highlighted studies in the literature review do not explicitly address the determinants of internal control in the business organizations in Ethiopia. A scarcity of literature in the area of study exists, particularly in the developing states like Ethiopia. The few that have been conducted in the third world nations have eluded criticism in the criteria title; scope methodology used hence the research gaps in terms of literature. The literature review highlights a number of theories in relation to variables (independent and dependent) and the conceptual framework of the variables by analyzing the relationship between them.

2.4. Conceptual Framework

These are sets of coherent ideas or concepts organized in a manner that makes them easy to understand, they are theoretical structures of assumptions, principles and rules that hold together the ideas comprising a broad concept. The conceptual framework comprises of dependent and independent variables. The effectiveness of internal control system is the dependent variables. It is achieved by the presence and proper functioning of all the

predefined independent variables in relation to each category of the organization's objectives Owusu (2012). Proper functioning of independent variables provides reasonable assurance of proper functioning of dependent variables. The banks realize present objectives of efficient and effective operations, collection of accurate, reliable and informative financial reports that comply with relevant legal and regulatory requirements.

Figure2-1Conceptual Design



Source: Adapted from Owusu (2012) with some modification based on different literature.

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1. Research Design

In this study, both quantitative and qualitative approaches were adopted to evaluate the determinants of effective Internal Controls of Ethiopian commercial Banks. The study would be explanatory in nature. The study used a structured-questionnaire as the primary data collection instrument to gather data. Only employees of the selected bank were sampled. Data analysis was done quantitatively using descriptive statistics such as frequency distribution, mean and standard deviation and regression analysis.

3.2. Population and Sampling

3.2.1. Target population

This study focused on employees of Ethiopian Commercial banks found in Wolkite town. The target population of the study was all branches of banks that found in Wolkite Town. In Wolkite town there are 11 bank branches and 8 banks. For this study only employees who had been working in the banks for at least one year were considered by the researcher and select wolkite town purposively because no research conducted in the area and budget and time constraint.

3.2.2. Sample Size

To determine the sample size using the formula given by Yamane (1967) in drawing an adequate sample size from a given population at 95% confidence level (or e = Level of precision is 0.05).

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

Where: **n**= Sample size required for the study;

N= total population size;

e = Level of precision

$$n = \frac{N}{1+(N)e^2} = \frac{172}{1+(0.05^2)172} = \frac{172}{1.43} = 120 \text{ is the total sample size}$$

Table 3-1: List of commercial bank in Ethiopia Wolkite town

S.N	Name o branch	Number of employees	Sample of respondents in this study by using sampling proportion
1	Bekur CBE branch	15	$\frac{15}{172} * 120 = 10$
2	Yejoka CBE branch	17	$\frac{17}{172} * 120 = 12$
3	Wolkite branch	25	$\frac{25}{172} * 120 = 17$
4	Gubre branch	13	$\frac{13}{172} * 120 = 9$
5	Buna Bank	10	$\frac{10}{172} * 120 = 7$
6	Wogagen Bank	12	$\frac{12}{172} * 120 = 9$
7	Hibret Bank	14	$\frac{14}{172} * 120 = 10$
8	Birhan Bank	11	$\frac{11}{172} * 120 = 8$
9	Dashen Bank	13	$\frac{13}{172} * 120 = 9$
10	Nib Bank	24	$\frac{24}{172} * 120 = 17$
11	Abisinya Bank	18	$\frac{18}{172} * 120 = 12$
	Total	172	120

Source: Survey data (2021)

3.2.3. Sources of data

Primary data source is employed in this research. Primary sources allow the researcher to examine the evidence firsthand without the opinions, analysis, and interpretation of others. The survey questionnaire helps the researcher to collect a primary source of data questionnaires allow the collection of large amounts of data within a short period of time. To collect the data from the respondents structured questionnaire was used. These were distributed to the internal control employees, auditors and finance employees in the banks and their response was assumed to be filled using experience, attitude, opinion and perception.

3.3. Data Collection Instrument

According to Burns and Grove (1999), data collection is a process of gathering information using questionnaires, interviews or observation. According to Talbot (1995), if a researcher wants to obtain information about attitudes, feelings, beliefs and perceptions which are not immediately observable, the value of structured questionnaires cannot be overemphasized. Therefore, the data for this research were collected using structured questionnaires as a primary data collection tool.

3.4. Reliability and Validity

Reliability and validity are important concepts in research. Many research mistakes occur due to problems related to research validity and reliability. In order to maintain reliability and validity of the research, the researcher used structured questionnaires and data analysis. In addition, the researcher used colleagues and peer reviews of the research project (from the beginning to the completion). Most importantly, the researcher repeatedly met with the advisor and this in turn was creating a chance to minimize errors in conducting the research.

3.5. Model Selection

In order to get necessary data for the study, the researcher used a questionnaire designed in modified Likert-scale were administered on 88 respondents the selected banks. The data were analyzed using the multiple regression analysis with the aid of the Statistical Package for Social Sciences (SPSS) version 21.

The model specification designed for this study was estimated below:

$$ICS = \alpha + \beta_1(POER) + \beta_2(WOC) + \beta_3(IND) + \beta_4(GOR) + \beta_5(WIECM) + \beta_6(WEDOS) + E_{it}$$

Where:

α = Constant coefficient

β = Regression coefficients for measuring independent variables

POER = Presentation of early report

WOC = Workers competence

IND = Independence of internal control staff

GOR = Good remuneration of internal control staff

WIECM = Willingness to enforce control measures

WEDOS = Well designed organizational structure

E_{it} = Error component showing unobserved factor

For the purpose of this study dependent and independent variable are measured using 5 Likert-scale questioners.

3.6. Data Analysis

Karmal (1999) refers to data analysis as the computation of certain measures along with searching for some patterns of relation that exists among data groups. In analyzing the data obtained from the administration of the questionnaire, descriptive statistics was used. Descriptive statistics such as frequency distribution was used to assess the demographic profile of the respondents. Also, measures such as mean and standard deviation were used to present the causes of fraud to the bank, the extent of implementation of internal control system, the effect of fraud on the bank. Data analysis was done with the statistical software of Statistical Package for Social Sciences Version 21. Findings of the study would be presented pictorially via frequency tables and include also inferential statistics as the study used inferential statistics the regression analysis to analyze the data.

3.7. Ethical Consideration

In determining the participants of a study, it is ethical to ensure that the research is beneficial for the participants in alleviating a given problem (Cresswell, 1994). Accordingly, this study aims at identifying the challenges in targeting and acquiring the right applicant pool and majority of the participants were employees who are directly attached internal control procedures like branch managers, auditors and employees with good work experience to give good information on the idea raised.

The researcher has briefly explained the purpose of the study to the employees and then participants who were included in the research after they gave full consent of their willingness to participate in the study. The researcher has assured that confidentiality of the recordings of the questionnaire and no record to be kept about the identity of the participants. The correct reporting of the final study is another ethical issue. The researcher will analyze the data based on the explicit response of the participants, the notes from observation and finding from the secondary data. Therefore, it is minimal to report a finding that is not supported by the analysis.

CHAPTER FOUR

4. RESULTS AND DISCUSSION

4.1. Introduction

As it was mentioned in the previous chapter, the aim of this study was to analyze the determinants of internal control system in commercial banks of Ethiopia. Hence, this chapter presents the analysis and discussion of research findings obtained from the questionnaires. It reports the investigation results obtained from all internal auditors. The discussion begins with the questionnaires response rate followed by the descriptive statistics of the respondents' related questions, like Qualification, Field of study and Professional certification and Year of experience in internal control department. The results of the regression assumption test and multiple regression results also reported and finally the results of hypothesis testing are presented.

4.2. Descriptive statistics on demographic variables

4.2.1. Response Rate

Out of the 120 questionnaires were distributed to internal control employees, auditors and finance employees of the banks and from which all 88 questionnaires were collected, giving the response rate of 73.3%.

Table 4-1 the response rate in each bank

S.N	Name of branch	Expected number of Sample respondents	Number of response	percent
1	Bekur CBE branch	10	10	100%
2	Yejoka CBE branch	12	9	75%
3	Wolkite branch	17	16	94%
4	Gubre branch	9	9	100%
5	Buna Bank	7	4	57%

6	Wogagen Bank	9	5	55%
7	Hibret Bank	10	6	60%
8	Birhan Bank	8	7	87.5%
9	Dashen Bank	9	6	67%
10	Nib Bank	17	8	47%
11	Absiniya Bank	12	8	67%
	Total	120	88	73.3%

Source: Survey data (2021)

4.2.2. Background of Respondents

Demographic characteristics of the respondents regarding Gender, Qualification, Field of study and Year of experience in commercial bank of Ethiopia in Wolkite city the participants are presented in the table 4.2 below. According to the result, respondent's genders are male 85.23% and female 14.77%. Educational levels of the respondents' 12.5% diploma, 71.5% have first degree and 15.9% have postgraduate degree. Regarding field of study the respondents' were composed of internal control employees 20.45%, Auditor 26.14%, and Finance employees 53.41%. Hence, the majority of commercial bank of Ethiopia in Wolkite town team has Finance employee's related fields. This implies that the majority of the internal auditors can perform internal controlling work by their field of study. Finally respondents experience of work 42.04% are less than five years, 53.41% are 6-10 years and 4.57% are 11-16 and above years. Internal control system must collectively have the necessary education, professional qualifications, and experience to be able to add value and improve the organization's operations (Mihret and Woldeyohannis, 2008). This finding indicates that the banks have problems of experienced human resource which contribute to the set back to the effort of strengthening internal control system.

Table 4-2: Background of Respondents

Demographic Questions		Responses Rate		
		Freq.	Percentage	Cum.
Respondents Gender	Female	13	14.77	14.77
	Male	75	85.23	100
	Total	88	100	
Education level of respondents	Diploma	11	12.5	12.5
	Degree	63	71.59	84
	Master	14	15.9	100
	Total	88	100	
Current position of respondents	Internal control employees	18	20.45	20.45
	Auditor	23	26.14	46.59
	Finance employees	47	53.41	100
	Total	88	100	
Work Experience of Respondents	Less than five years	37	42.04	42.04
	6-10 years	47	53.4	95.45
	11-15 and above	4	4.57	100
	Total	88	100	

Source: Survey data (2021)

4.3. Reliability Analysis

Zikmund (2003) stated that the researcher should conduct the pre-testing to ensure the questionnaire’s reliability and to make sure that measures are free from error and therefore yield consistent result. Cronbach’s alpha is a reliability measure designed by Lee Cronbach in 1951. Cronbach’s alpha is a coefficient of reliability.

Cronbach’s alpha reliability coefficient normally ranges between 0 and 1. However, there was actually no lower limit to the coefficient. The closer Cronbach’s alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. George and Mallery (2003) provide the following rules of thumb: ≥ 0.9 Excellent: ≥ 0.8 Good: ≥ 0.7 Acceptable: ≥ 0.6 Questionable: ≥ 0.5 Poor and ≤ 0.5 Unacceptable.” It is important that the questionnaire for this study produces an Alpha score of 0.8 and above to confirm its reliability (Orodho & Kombo, 2002).

Table 4-3: Reliability Analysis

No	VARIABLES	Cronbach's Alpha	N of Items
1	Worker competency	.865	4
2	Enforce control	.878	4
3	Organization structure	.899	3
4	Remuneration internal control system	.855	4
5	Independency internal control staff	.895	4
6	Early report presentation	.876	3
	Aggregate (total)	0.878	7

Source: Developed by the researcher on SPSS, 2021

From table 4.3 above, the value for Cronbach’s Alpha (α) of all variables aggregate result was 0.878 for all variables. If Alpha (α) is greater than 0.7 (Orodho & Kombo, 2002), it means that it has high reliability, then the responses generated for all of the variables’ used in this research were reliable enough for data analysis.

4.4. Assessment of Ordinary Least Square Assumptions

The following assumptions must be considered when using multiple regression analysis. The assumptions are met; essentially this means that it is the most accurate estimate of the effect of X on Y (Dan and Sherlock, 2008).

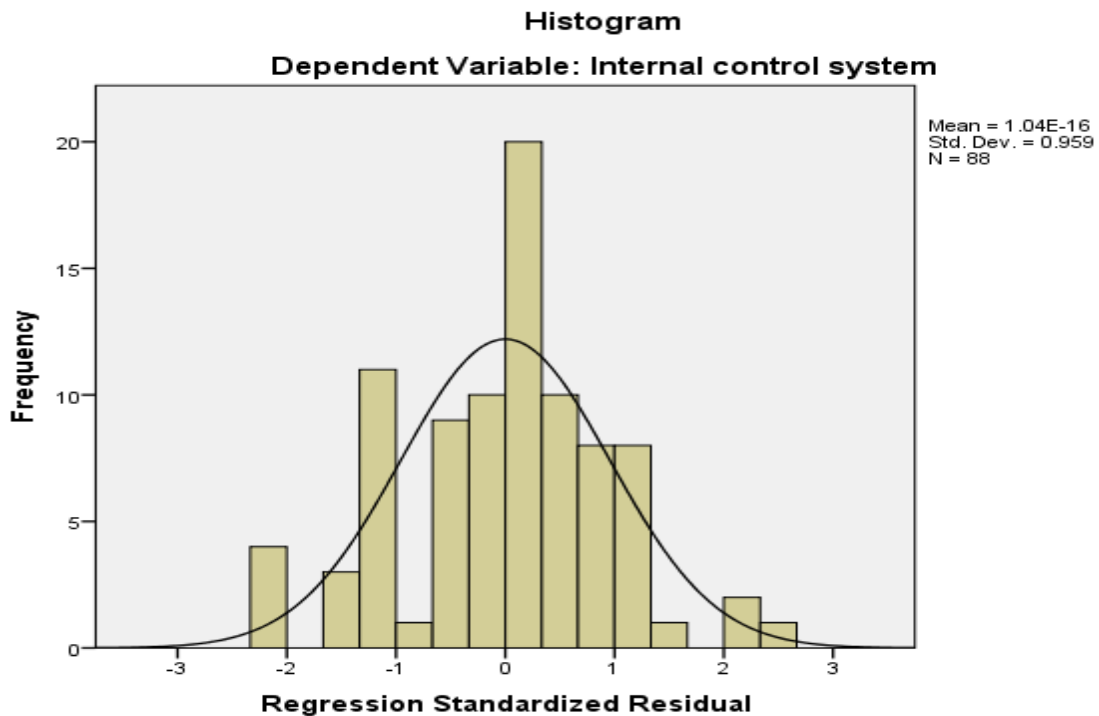
4.4.1. Assessment of Normality

In order to test the normality of data, Kolmogorov-Smirnova test of normality were used and conducted on SPSS 21. According to Field (2009), when the test is non-significant ($p > 0.05$) it shows that the distribution of the sample is not significantly different from a normal distribution. Accordingly, the result of test showed in the table 4-3 that all variables were found to be normal and the presence of normality was accepted at $p > 0.05$.

4.4.2. Assessment of Homoscedasticity

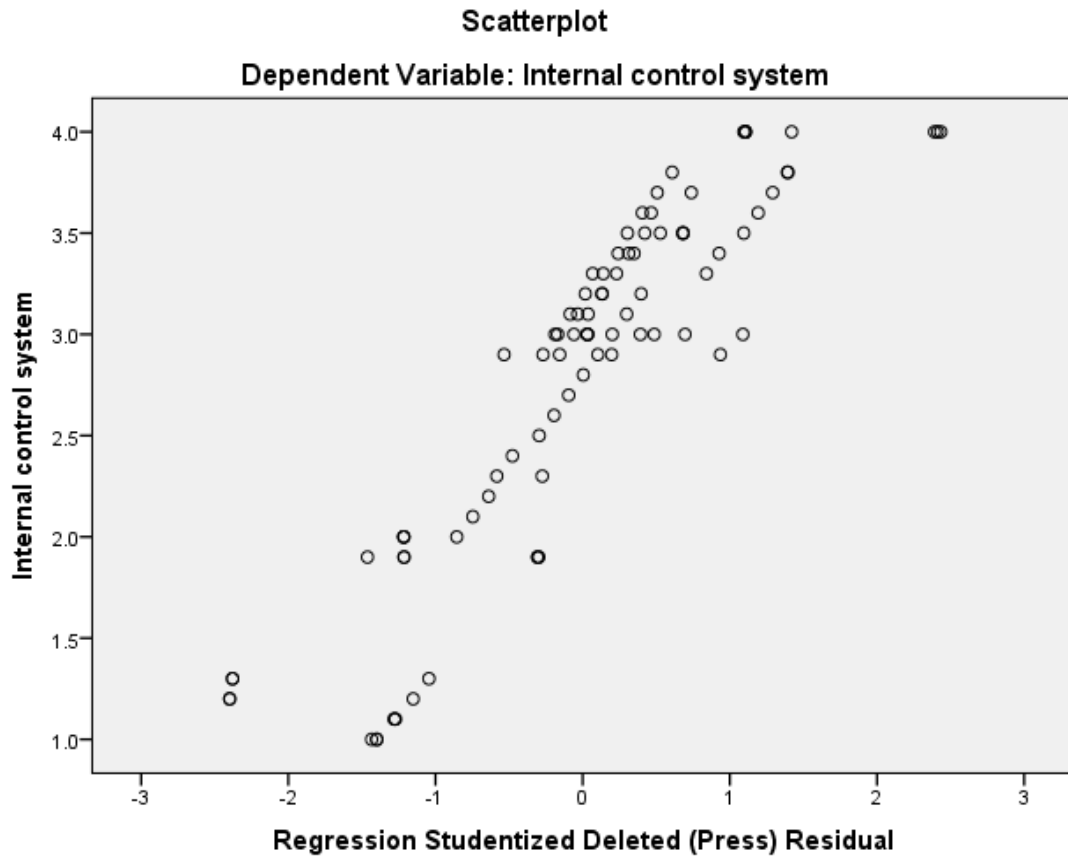
This assumption means that the variance around the regression line is the same for all values of the predictor variable (X). A histogram and scatter plot of residuals versus value is good way to check for homoscedasticity.

Figure 4-1 Test of Normality



Source: Survey data (2021)

Figure 4-2 Test of Homoscedasticity



Source: Survey data (2021)

Homoscedasticity means “having the same scatter.” assumes that different samples have the same variance, even if they came from different populations. The opposite is Heteroscedasticity “different scatter”, where points are at widely varying distances from the regression line. As figure 4.1 and 4.2 shows a violation of this assumption. There is no clear pattern in the distribution. The points are at widely varying distances from the regression line. It is Heteroscedasticity as a result reduces the exactness of the estimates in OLS linear regression.

4.4.3. Assessment of Multicollinearity

The aim of this test is to analyze whether the independent variables are correlated each other. This test is done by analyzing the value of tolerance and variance inflation factor (VIF). Multicollinearity exists when tolerance value below 0.10 and Variance Inflation

factor (VIF) greater than 10 in the correlation matrix are the causes for the Multicollinearity existence (Field, 2009; Adhista, 2015). Tolerance is a statistics used to indicate the variability of the specified independent variable that is not explained by the other independent variables in the model. However, the table 4.4 bellow shows that there is no Multicollinearity between different variables

Table 4-4: Co-linearity Statistics

Variables	Collinearity Statistics	
	Tolerance	VIF
Worker competency	0.675	1.482
Enforce control	0.573	1.745
Organization structure	0.731	1.368
Remuneration internal control system	0.703	1.423
Independency internal control staff	0.833	1.072
Early report presentation	0.862	1.16

Source: Survey data (2021)

The value of tolerance from all independent variables are more than 0.1 While, the values of VIF are less than 10. It means that all independent variables are not correlated each other and free from Multicollinearity. In the same way, Multicollinearity exists when there are strong correlations among the predictors and the existence of r value greater than 0.80 (Field, 2009). The correlation matrix of majority the variables have the paired values among the predictors are less than 0.80 see table 4.5 below indicates that there were no Multicollinearity problems that alters the analysis of the findings, rather it leads to the acceptance of r value, tolerance and VIF values.

Table 4-5: Pearson Correlations Matrix

Variable	Internal_C S	Worker_C	Enforce_C	Organizati~t	Remunarat~S	Independec~ C	Early_p
Internal_CS	1.000						
Worker_C	0.1091	1.0000					
Enforce_C	0.0497	0.2637	1.0000				
Organizati~t	-0.2315	0.1251	-0.4480	1.0000			
Remunarat~S	0.3034	0.5220	0.2754	0.0304	1.0000		
Independec~C	-0.0469	-0.0352	-0.2366	0.0997	-0.0102	1.0000	
Early_p	0.0252	0.1011	0.3557	-0.1086	0.1307	-0.0013	1.0000

Source: Survey data (2021)

4.4.4. Assessment of Autocorrelation

Table 4-6: Model summery

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.786 ^a	.618	.590	.562	1.906

- a. Predictors: (Constant), Work competency , Remuneration IC staffs, Enforce controls, Early report, Independency of IC staffs, Organization strictures
- b. Dependent variable: Internal control system

Source: Survey data (2021)

Data were assessed to ensure that the autocorrelation is not a threat for the use of OLS for analysis. This assumption can be tested with the Durbin-Watson test which test for serial correlation between errors and the value closer to 2 are acceptable (Field, 2009). In this survey data, SPSS output Durbin-Watson statistics value is 1.906 close to 2 suggests that there is no severe autocorrelation among error terms.

4.5. Regression Results and Hypothesis Testing

The regression result that are obtained by regressing the internal control system in adding value for the internal control system and the internal control system ability in adding value for their early report presentation, Independency internal control staff, Worker competency, Organization structure, Remuneration, Enforce control. Finally, the hypothesis tests were undertaken based on the regression output results.

4.5.1. Regression Analysis Results

The regression analysis was used to examine a dependent variable of internal control system by early report presentation, Independency internal control staff, Worker competency, Organization structure, Remuneration, Enforce control. The result shows, indicators of internal control system by using the variables identified in the model. When doing regression analysis the researcher determines whether or not there is a relationship between the attributes and internal control system by examining the ANOVA result.

Table 4-7: ANOVA Table

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	41.519	6	6.920	21.875	.000 ^a
	Residual	25.623	81	.316		
	Total	67.142	87			
a. Predictors: (Constant), Work competency , Remuneration IC staffs, Enforce controls, Early report, Independency of IC staffs, Organization strictures						
b. Dependent Variable: Internal control system						

Source: Survey data (2021)

If the F statistic is significant, can assume the independent variables taken together have a relationship with the dependent variable. In this study the probability of the F statistic for the regression analysis is 21.875 and significant .000^b, less than the level of significance of 0.05. Hence, the dependent variable has relationship with the independent variable

identified in this study. Generally, it is possible to say the model is a good fit for the variable identified in this study.

Table 4-8: Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.786 ^a	.618	.590	.562	1.906

c. Predictors: (Constant), Work competency , Remuneration IC staffs, Enforce controls, Early report, Independency of IC staffs, Organization strictures

d. Dependent variable: Internal control system

Source: Survey data (2021)

The model summary of the study is shown in table 4.8. R statistic represents the strength of the relationship between internal control system and other independent variables. In this study the adjusted R square statistic tells us the proportion of variance in the independent variable that is accounted for to explain the dependent variable. Table 4.8 shows that the adjusted R Square value is 59%. It means that the ability of independent variables to explain the dependent variable is 59% the model was good fit, while; 41% is affected by another factors beyond this research. In other words, the overall contribution of early report presentation, Independency internal control staff, Worker competency, Organization structure, Remuneration, Enforce control accounted for 59% to explain the internal control system.

Table 4-9: Coefficients^a

Coefficients ^a							
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Significant at - level
		B	Std. Error	Beta			
1	(Constant)	4.461	.700		6.370	.000	
	Early report	-.049	.084	-.042	-.580	.564	
	Independency of IC staffs	.130	.075	.123	1.723	.018	**
	Remuneration IC staffs	.397	.079	.359	5.000	.000	*
	Organization structure	.429	.055	.573	7.821	.000	*
	Enforce controls	-.379	.088	-.312	-4.304	.000	*
	Worker competency	.042	.085	.035	.492	.624	
a. Dependent Variable: Internal control system							
*, ** and *** significance at 1%, 5% and 10% level of significance							

Source: Survey data (2021)

The contribution of each independent variable in the model, the beta (β) sign also shows the positive effect of the independent variables coefficient over the dependent variable. In this study, beta sign of all the independent variable shows the positive and negative effect on the predicted dependent variable. That means any increase in the independent variable lead to increase and decrees in the dependent variable, internal control system. Based on the statistical significances of the independent variable over the dependent variable, 4 independent variables like organization structure, remuneration internal control staff, Independency of IC staffs and Enforce controls are significant 5 percent level of significance. The remaining independent variable early report presentation and Work competency have insignificant contribution for internal control system because they have

significance value of greater than the standard level of significance at 5% level of significant.

4.5.2. Hypotheses Test

The regression analysis results which are presented in the table 4.9 help the researcher to make accurate test of research hypotheses proposed at the beginning of this study. The hypotheses sought to test for a significant positive association of remuneration internal control system and a significant negative association Enforce control and Organization structure with internal control system. The following hypotheses test were conducted based on the regression results of the internal control system obtained from the regression output.

Hypothesis1: Presentation of early report has a positive significant effect on Internal Control of commercial banks of Ethiopia

The first hypothesis of this research revealed that there were the direct relationship between the presentation of early report and internal control system. These hypotheses were not supported by the regression result as of the regression results insignificant related with the internal control system P-value. As shown in the table 4.9 the coefficient of presentation of early report ($\beta = -.049$) has a negative effect and statistically ($t=-.580$, $p = 0.564$) insignificant relationship with the internal control system. The regression result not supports this hypothesis at given level of significance. Presentation of early report has negative coefficient and P-value is insignificant at level of significance and the regression analysis output result leads not to support the proposed hypothesis (H1).

Hypothesis2: Workers competency has a positive significant effect on Internal Control of commercial bank of Ethiopia

The second hypothesis of this study proposed that the internal control system is directly related with the workers competency. The positive beta sign and a statistically insignificant result of workers competency related with the internal control system ($\beta = 0.042$, $t = 0.492$, $P= 0.624$).The regression result not supports this hypothesis at given level of significance. Workers competency has positive coefficient 0.042 but P-value is insignificant at level of significance.

Hypothesis3: Independence of internal control staff has a positive significant effect on Internal Control of commercial bank of Ethiopia.

The third hypothesis of this research proposed that the internal control system is indirectly related with the: Independence of internal control staff in study area. The result indicated that independency of IC staffs has positive and statistically significant result with the internal control system ($\beta = 0.130$, $t = 1.723$, $P = 0.018$). The regression result supports this hypothesis at given level of significance and not rejected proposed hypothesis. Independence of internal control staff has positive coefficient 0.130 and P-value is 0.018 is at significant level this means independence of internal control staff increase in one percent internal control system will have increase by 13% change.

Hypothesis4: Good remuneration of internal control staff has a positive significant effect on Internal Control system of commercial bank of Ethiopia.

The forth hypothesis of this research revealed that there were the direct relationship between the Remuneration internal control staff and the internal control system. This hypothesis was supported by the regression result as per the regression results significant related with internal control system at given level of significance. As shown in the above table the coefficient of remuneration internal control staff ($\beta = 0.397$, $t = 5.000$, $p = 0.000$) significant related with the internal control system. Even if this variable have a coefficient of positively related with the internal control system as a result of its significant regression analysis output result leads highly support the proposed hypothesis (H4). Significance of the remuneration internal control staff support in determining the internal control system does mean that it does completely contribute to the effectiveness of internal control system. It may even be that all the other determinants of internal control system derive from the support of top management. This finding consistent with previous studies, most of the literatures mentioned in this paper identified that management support as a crucial factor for internal control system (Cohen and Sayag, 2010; Georg et al, 2015; Shewamene, 2014; Mihret and Yismaw, 2007). Based on the above results, a hypothesis is accepted which indicated that there is statistically significant relationship between remuneration internal control staff and internal control system.

Hypothesis 5: Willingness to enforce controls has a positive significant effect on Internal Control system of commercial banks of Ethiopia.

This hypothesis which is proposed to support internal control system is the Enforce control. The regression output result reject this hypothesis and accept the alternative because the result of the regression result indicate that the level of significance at 5% of significance and negatively related coefficients ($\beta = -.379$, $t = -4304$ and $p = 0.000$) contributes for the on Internal Control system. Willingness to enforce controls has negative coefficient -0.379 and P-value at significant level 0.000 this means that one unit change on willingness to enforce controls on Internal Control system will have an effect of -37.9% change on the other factor are keep constant.

Hypothesis 6: Well-designed organizational structure has a positive significant effect on Internal Control of commercial banks of Ethiopia

The last hypothesis which is proposed to support the internal control system is the Well-designed organizational structure. The regression output result supports this hypothesis with significantly correlated variables with the level of significance at 5 percent level of significance and positively related coefficients ($\beta = 0.429$, $t = 7.821$ and $p = 0.000$) contributes for the internal control system. Well-designed organizational structure has positive coefficient 0.429 and P-value at significant level 0.000 this means Well-designed organizational structure change in one unit the internal control system will have increase by of 42.9% on average the factor are keep constant. From the above results the hypothesis that is the positive relationship between Well-designed organizational structure and internal control system.

CHAPTER FIVE

5. CONCLUSIONS AND RECOMMENDATIONS

This chapter provides summary, conclusions and recommendation based on the main findings discussed in the preceding chapter.

5.1. Summary of the Finding

In line with the objective of this study to assess Determinants of internal control system: a study on selected commercial banks in Ethiopia, the researcher has adopted questionnaires to gather primary data from Wolkite town Ethiopia commercial banks employees. The collected data from the respondents was analyzed using SPSS version 21. According to the output ability of independent variables to explain the dependent variable is 59%. Thus, the result of this study confirmed the prior internal control system

5.2. Conclusions

Internal control system plays important role in an organization success, the existence of effective internal control system is critical. Organizations with effective and efficient internal control system are able to detect fraud more than those that have not such a function within their organizations. By taking this aspect into consideration, this study was identified factors that determine the internal control effectiveness in the commercial banks in Ethiopia and then analyzed should carry out to enhance the internal control system. And also by testing of the proposed hypotheses showed relations of these independent variables with the internal control system the following conclusions were drawn.

The majority of the respondents are males (85.23%) and the rest are female in study area, 71.51% of respondents are degree holders and the remaining diploma and masters 12.5% and 15.9% respectively. Work experiences of respondents are less than five years 42.04%, 53.41% are 6-10 years and 4.57% are 11-16 and above years. Current positions of respondents were internal control employees 20.45%, auditor 26.14% and Finance employees were 53.41%.

This study focuses on Determinants of internal control system: a study on selected commercial banks in Ethiopia. To analyze the worker competency, enforce control,

organization structure, remuneration internal control staff, independency internal control staff and early report presentation on the internal control system. The result showed that Remuneration of internal control staff has significant and positive effect on the internal control system. While enforce control and organization structure have negative and insignificant effect in the internal control system. The ability of independent variables to explain the dependent variable was 59% on average.

5.3. Recommendations

As per the findings from the analysis of the collected data; the following recommendations are forwarded in order to achieve internal control effectiveness

- The study result indicates that a significant positive relationship between remuneration of internal control staff and internal control system of the banks. The banks management should emphasize on the role of remuneration internal control staff because of a key to controlling system
- These study result independency internal control staffs was significant effect. However, Most of the previous research conformed that independency internal control staff is the most influencing factor among the factors that contribute to the variation of quality internal control system and this obviously crucial factor to the effective controlling function. In fact, the independency internal control staffs is important to the success of the internal control system in the organization. Without support from top management, internal control system is not sufficiently objective and independent, has not enough resources to effectively fulfil its works.

5.4. Suggestions for Future Research

This study has been methodological limitations. It is questionnaire-based, and a measure of the variables, both the dependent and independents variable, is established according to the perceptions of the internal control system. Future studies are called to extend this study by examining the influence of other factors on the internal control system. This may provide new insights of the possible factors that could influence this system.

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Appendix-a questioner

WOLKITE UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF ACCOUNTING AND FINANCE

Dear participants

I am a post graduate student in the department of Accounting and finance: for the partial fulfillment of Master's Degree in accounting and finance at Wolkite University. Now I am conducting a research in the area of "determinants of internal control system (ICS): a study on selected commercial banks in Ethiopia".

This study is conducted on commercial banks of Ethiopia under Gurage zone branches with the aim of to identify the determinants of internal control system. The conclusions of the study will be drawn in aggregate terms, without any reference to specific office or individual respondents. Therefore your answers are very important and valuable for the successful completion of the study.

Please fill out all of the questions to the best of your knowledge accordingly the questions require. Your response will be kept confidential and it is only for academic purpose.

Your honest and thoughtful response is valuable Thank you in advance for your support and participation.

With best regards

General instructions

1. For questions that demands your opinion, please try to describe honestly as per the questions on the space provided tick (v) as appropriate.

Section A Personal information of the respondent

a. For the following the question put write single in the box provided.

1. Sex. Male female
2. Marital status. Married divorced widow Single
3. Education levels. Certificate degree diploma master degree other
4. Work experience.
 1. 0-5 6- 10
 2. 11-15 16 and above
5. What is your Current working position?
 - ✓ Internal control employees
 - ✓ Auditor
 - ✓ Finance employees

Section B

The following set of statements describes your general feelings towards internal control system. Please indicate how Agree or Disagree you feel with each of these features of your present job by placing a tick in the appropriate box.

- ✓ **1 for strongly Disagree, 2 Disagree, 3 neutral, 4 Agree and 5 strongly agree.**
- ✓ Please put “√” on the answer inside the box. There is no right or wrong answers.

II. Questionnaire for independent variable

No	or Questions descriptions	Strongly disagree(1)	Disagree (2)	Neutral (3)	Agree(4)	Strongly agree(5)
1.	EARLY REPORT(independent variable)					
1.1.	All financial reports were Early Presented and considered for decision making by management					
1.2.	All Information the bank communicated with internal control personnel staffs.					
1.3.	The bank communicates early with external parties regarding matters affecting the functioning of other components of internal control.					
2.	INDEPENDENCE OF IC STAFFS(independent variable)					
2.1.	IC staffs must carry out their work freely and objectively					
2.2.	IC staffs cannot subordinate their judgment on control matters to that of others					
2.3.	IC staffs should have the support of senior management, the board of directors and the audit committee.					
2.4.	Responsibilities are divided fairly among IC staff members					

3.	REMUNERATION OF IC STAFFS(independent variable)					
3.1.	The commercial banks review and updating developing a new, remuneration strategy progressively					
3.2.	there is a transparent and direct link between the remuneration strategy and business strategies and desired business outcomes					
3.3.	The commercial bank have regulatory the determination of the appropriate remuneration with market position and peer group					
3.4.	The commercial bank has appropriate mix of base salary, benefits and performance (variable) pay.					
4.	ORGANIZATIONAL STRUCTURE(independent variable)					
4.1.	The commercial bank have appropriate internal control Job design involves defining areas of decision-making responsibility, identifying goals and expectations, and establishing appropriate indicators of success.					
4.2.	The commercial bank have appropriate internal control department that arranged according to logical organization structure.					
4.3.	The commercial bank have appropriate internal control organizational structure determines the effectiveness and efficiency of internal controlling system					
5.	ENFORCING CONTROLS (independent variable)					
5.1.	Management enforces employees to act in accordance to					

	internal controlling system of the company					
5.2.	My work unit's policies and procedures are reasonable, consistent and effective					
5.3.	Internal control department has documented enforcing policies and procedures					
5.4.	Enforcing the required written procedures of internal control is necessary in achieving good internal control system					
6	WORKERS COMPETENCE(independent variable)					
6.1	IC staffs have enough knowledge, skills and experience					
6.2	The commercial banks have company employs sufficient and competent workers to successfully carryout their responsibilities					
6.3	The commercial banks gives the opportunity of getting training helping for skill develop and to update your knowledge and competence internal department					
6.4	Employees in your work unit have knowledge, skill and training necessary to perform their job adequately					
	INTERNAL CONTROL SYSTEM (dependent variable)					
1	The commercial bank has separation of duties.					
2	The commercial banks have Checks and balances.					
3	The commercial banks have Safeguarding of records.					

4	The commercial bank gave the training level and competence of employees.					
5	The commercial bank has the effective internal audit function.					

Thank you for your participation

Appendix- b List of commercial bank in Ethiopia Wolkite town

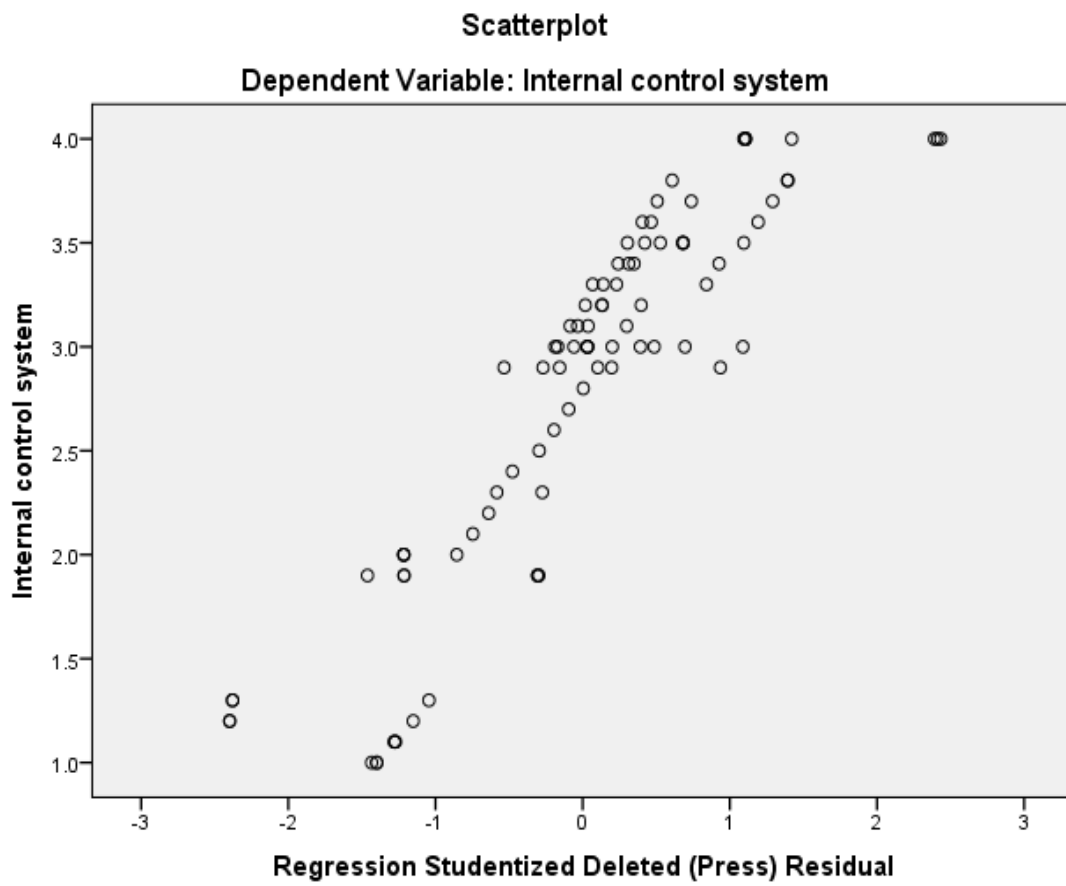
S.N	Name o branch	Number of employed	Sample of respondents in this study by using sampling proportion
1	Bekur CBE branch	15	$\frac{15}{172} * 120 = 10$
2	Yejoka CBE branch	17	$\frac{17}{172} * 120 = 12$
3	Wolkite branch	25	$\frac{25}{172} * 120 = 17$
4	Gubre branch	13	$\frac{13}{172} * 120 = 9$
5	Buna Bank	10	$\frac{10}{172} * 120 = 7$
6	Wogagen Bank	12	$\frac{12}{172} * 120 = 9$
7	Hibret Bank	14	$\frac{14}{172} * 120 = 10$
8	Birhan Bank	11	$\frac{11}{172} * 120 = 8$
9	Dashen Bank	13	$\frac{13}{172} * 120 = 9$
10	Nib Bank	24	$\frac{24}{172} * 120 = 17$
11	Abisiniya Bank	18	$\frac{18}{172} * 120 = 12$
	Total	172	120

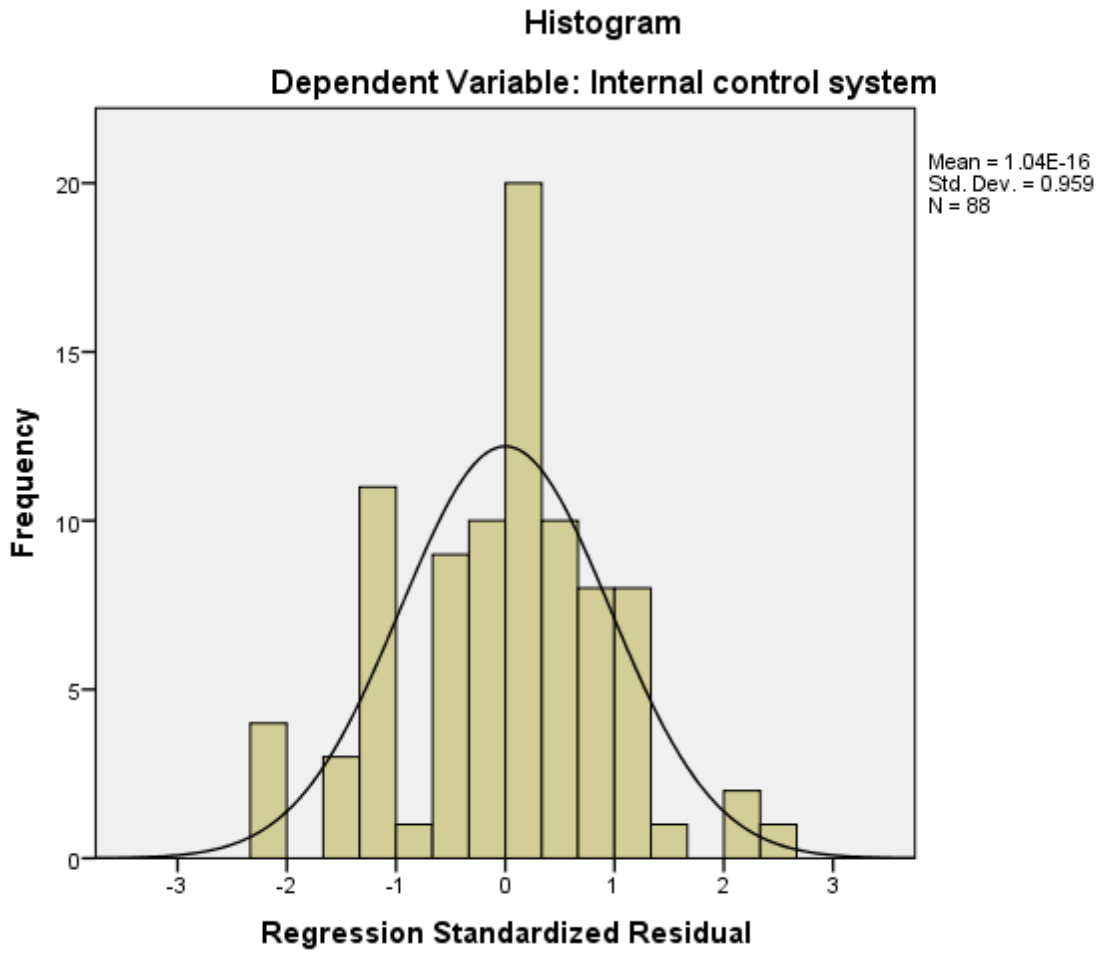
Appendix-c the response rate in each bank

S.N	Name of branch	Expected number of Sample respondents	Number of response	percent
1	Bekur CBE branch	10	10	100%
2	Yejoka CBE branch	12	9	75%
3	Wolkite branch	17	16	94%
4	Gubre branch	9	9	100%
5	Buna Bank	7	4	57%
6	Wogagen Bank	9	5	55%
7	Hibret Bank	10	6	60%
8	Birhan Bank	8	7	87.5%
9	Dashen Bank	9	6	67%
10	Nib Bank	17	8	47%
11	Abisiniya Bank	12	8	67%
	Total	120	88	73.3%

Appendix-d Background of Respondents

Demographic Questions		Responses Rate		
		Freq.	Percent	Cum.
Respondents Gender	Female	13	14.77	14.77
	Male	75	85.23	100
	Total	88	100	
Education level of respondents	Diploma	11	12.5	12.5
	Degree	63	71.59	84
	Master	14	15.9	100
	Total	88	100	
Current position of respondents	Internal control employees	18	20.45	20.45
	Auditor	23	26.14	46.59
	Finance employees	47	53.41	100
	Total	88	100	
Work Experience of Respondents	Less than five years	51	57.3	57.3
	6-10 years	33	37.5	94.8
	11-15 and above	4	4.57	100
	Total	88	100	





Appendix-e Coefficients^a

Coefficients^a							
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Significant at - level
		B	Std. Error	Beta			
1	(Constant)	4.461	.700		6.370	.000	
	Early report	-.049	.084	-.042	-.580	.564	
	Independency of IC staffs	.130	.075	.123	1.723	.018	**
	Remuneration IC staffs	.397	.079	.359	5.000	.000	*
	Organization structure	.429	.055	.573	7.821	.000	*
	Enforce controls	-.379	.088	-.312	-4.304	.000	*
	Work competency	.042	.085	.035	.492	.624	
a. Dependent Variable: Internal control system							
*, ** and *** significance at 1%, 5% and 10% level of significance							

Appendix- f Pearson Correlations Matrix

Variable	Internal_ CS	Worker_ C	Enforce_ C	Organizati ~t	Remun arati~S	Indepe ndec~C	Early_ p
Internal_CS	1.000						
Worker_C	0.1091	1.0000					
Enforce_C	0.0497	0.2637	1.0000				
Organizati~t	-0.2315	0.1251	-0.4480	1.0000			
Remunarat~S	0.3034	0.5220	0.2754	0.0304	1.0000		
Independec~C	-0.0469	-0.0352	-0.2366	0.0997	-0.0102	1.0000	
Early_p	0.0252	0.1011	0.3557	-0.1086	0.1307	-0.0013	1.0000