

**INTERNAL CONTROL SYSTEMS AND FINANCIAL PERFORMANCE OF  
INSTITUTIONS OF HIGHER LEARNING:  
A CASE OF UGANDA COLLEGES OF COMMERCE.**

**BY**

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**DECLARATION**

I, **Okol Eric**, declare that this dissertation is my original work and has not been submitted to any university or institution of higher learning for any academic award.

Sign..... Date.....

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**APPROVAL**

This work has been done under our supervision and has met the research requirements of Kyambogo University and is now ready for submission.

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## **DEDICATION**

This dissertation is dedicated to my family who have stood with me all the way through this academic journey up to the end.

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## LIST OF ACRONYMS

ANOVA	Analysis of Variance
COSO	Committee of Sponsoring Organizations
CPA	Certified Public Accountant
FP	Financial Performance
GAAPs	Generally Accepted Accounting Principles
HOD	Head of Department
HOF	Head of Finance
HRM	Human Resource Manager
IC	Information and communication
ICA	Internal Control Activity
ICE	Internal Control Environment
PO	Procurement Officer
SPSS	Statistical Package for Social Science
UCCs	Uganda Colleges of Commerce
VIF	Variance Inflation Factor

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## ABSTRACT

The study examined the influence of internal control systems on the financial performance of institutions of higher learning with specific consideration of Uganda College of Commerce. The study specifically focused on addressing three objectives which included; to examine the influence of information and communication on financial performance of UCCs, to assess the internal control environment on financial performance of UCCs and to investigate the influence of internal control activities on the financial performance. The study was guided by the Principal- Agency Theory to conceptualize the variables as used in the study. The study adopted a case study research design that utilized both quantitative and qualitative approaches. Simple random sampling technique was used to select a sample of 120 out of a population of 123 respondents. Both questionnaire and interview methods were used to collect data from staff of Tororo, Aduku and Soroti. In the study, analysis was done at different levels first with descriptive statistics and linear regression analyses were conducted to address the study objectives. The study established that information and communication systems, internal control environment and internal control activities all had a significant influence on financial performance of UCCs. The study therefore concluded that internal control systems collectively predict the amount of variance in financial performance of institutions with those institutions that improve on information and communication, develop favorable internal control environment and improve on internal control activities are likely to register an increase in financial performance. The study recommended that efforts should be put in place to enable a communication system that allows free and effective movement of information among the staff and also draw strategies on how confidential information would be kept without leaking and also electronic information should be kept safely to avoid distortion by opportunistic staff, staff from the accounting section should be introduced to a system that allows instant recording of the transactions as they occur for accountability purposes. The UCCs need to create a favorable environment for efficient execution of their duties to minimize fraud; efficient and effectiveness of performance including management integrity and ethics are emphasized and strongly adhered to. The management of UCCs should ensure that there exist effective and strong internal control activities and good financial policies, the right employees to enable segregation of duties. A labeling system should be introduced in the UCC's to ensure that all assets procured are immediately labeled to avoid staff personalizing them and should be kept safely for all institutional use.

**Key words:** Information and Communication, Internal Control Environment, Internal Control Activities and Financial Performance

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Introduction**

The financial performance of any organization highly depends on how it utilizes the scarce resources to achieve organisational goals and objectives. This study therefore set out to examine the influence of internal control systems on financial performance of higher institutions of learning a case of Uganda Colleges of Commerce. This chapter one consisted of the background to the study, statement of the problem, objectives of the study, hypotheses of the study, conceptual framework, significance of the study, justification, scope of the study and operational definition of terms.

### **1.2 Background to the Study**

The background is presented in four perspectives which include; historical, theoretical, conceptual and contextual as presented in the following sub-sections.

#### **1.2.1 Historical Background**

In 1992, the Committee of Sponsoring Organizations of the Tread Way Commission (COSO) issued Internal Control Integrated Framework to help businesses and other entities with their internal control systems (COSO, 1994). In 2004 the framework was published expanding on internal control providing a broader focus on the whole subject of enterprise risk management (COSO, 2004). Internal control systems are so vital to all institutions worldwide and its origin differs country to country (Shim, 2011).

COSO is a committee composed of representatives from five organizations namely; American Accounting Association, American Institute of Certified Public Accountants, Financial Executives International, Institute of Management Accountants, Institute of Internal Auditors. Together, the COSO board develops guidance documents that help organizations with risk

assessment, internal controls and fraud prevention (Committee of Sponsoring Organisation of the Treadway Commission, 2013).

According to COSO (2013), internal control focuses on achieving objectives in operations, reporting and or compliance, is an ongoing process, depends on people's actions, not merely written policies and procedures, provides assurance senior management of security to a reasonable degree and can be adapted to the needs of the whole organization as well as each department, unit or process. The COSO framework divides internal control objectives into three categories: operations, reporting and compliance. According to Eke (2018), operations objectives, such as performance goals and securing the organization's assets against fraud, focus on the effectiveness and efficiency of your business operations; Reporting objectives, including both internal and external financial reporting as well as non-financial reporting, relate to transparency, timeliness and reliability of the organization's reporting habits and Compliance objectives are internal control goals based around adhering to laws and regulations that the organization must comply with.

The COSO framework has five components to an internal control system. Where control environment is the set of standards, processes, and structures that provide the basis for carrying out internal controls across the organization. This component includes; ethical values, organizational structure, commitment to employing competent employees and human resources policies (Micheni, 2016).

Risk assessment involving organization's analysis of the risks posed by internal and external changes, the ability to establish objectives and determine their suitability for your business and the process for weighing risks versus risk tolerances. Control activities are the tasks and activities laid out by organizational policies and procedures that help you achieve your internal control objectives. These include actions such as "authorizations and approvals, verifications, reconciliations, and business performance reviews."



The information and communication component recognize these two things as essential to any internal control system. COSO stresses the importance of relevant and high-quality information to control functions. Internal messages emphasizing the importance of control responsibilities, in addition to clear communication of expectations with external parties, is key to a strong system. Finally, monitoring your internal controls is just as important as establishing them. Use ongoing evaluations built into your business processes as well as regular separate evaluations, which will vary based on your level of risk, system effectiveness and regulation requirements (COSO, 2013). The United States of America and in Europe have supported countries and corporate associations to place more emphasis on their internal control frameworks and internal auditing functions and risk management.

Among the East African countries, Kenya is also believed to have made strong effort with regard to internal control systems in 1980 as managers tried to achieve resources management using the laws (Wainaina, 2011). Kenya has implemented the internal control systems in organizations (Micheni, 2016). Kenyan organizations are therefore, required by law to monitor activities for financial performance or any other risks that may happen for proper reporting of actions and behaviors of the working force using internal control systems (Nyamu, 2012).

Internal control systems in Uganda began in period of colonialism as London was made a base for control of activities carried out by colonial masters in their Protectorate-Uganda (Office of the Auditor General, 2016). Further, the year 1929 was also characterized by the establishment of central authority that supervised and controlled staff for the British administration within Uganda, any performance risks or poor financial reporting at work would be detected and controlled based on how central commanding authority in Britain preferred. However, ever since different Acts have been put in place to ensure that financial performance is enhanced and adhered to. For example, the Companies Act 2012 and Accountants Act 2013 of Uganda outline roles and responsibilities for different actors in private and public domains with regard to financial reporting

(Musaali, 2010). To date Uganda has bodies like CPA (Certified Public Accountant) that regulate and certify the financial reporting of different forms of organization.

### **1.2.2 Theoretical Background**

This study was guided by The Principal- Agency Theory as put across by (Jensen & Meckling, 1976). According to the Theory, a company consists of a link of contracts between the owners of economic resources and managers who are charged with using and controlling those resources (Jensen & Meckling, 1976).

These contracts are used with the intention of ensuring that technocrats who are agents align their own interest with the interest of the institutions of higher learning to achieve its objectives. Government (principal) does not directly promote the achievements of the objectives of the institutions but uses the institutional structures to do so by setting up the government rules and incentives to align the interest of the technocrats to that of the institutions. Institutions advocates having governance structures that separates governance from management. It also emphasizes respect for lines of authority (Unerman & Deegan, 2011).

Furthermore, an assumption of Agency Theory is that principals and agents act rationally and use contracting to maximize their wealth which may lead to moral hazard problem indicating that in an effort to maximize their own wealth, agents may face the dilemma of acting against the interests of their principals (Odongkara, 2016). A consequence of this assumption may be the moral hazard problem (Jensen & Meckling, 1976) indicating that in an effort to maximize their own wealth, agents may face the dilemma of acting against the interests of their principals.

Agency Theory posits that agents have more information than principals and that this Information asymmetry adversely affects the principals' ability to monitor whether or not their interests are being properly served by agents. The theory suggests the existence of professional managers to manage different departments on behalf of the owners (Kiel & Nicholson, 2003). The theory

argues that good collaboration among leaders has a significant influence on organizational performance and suggests that stakeholders in institutions should have significant powers in the operation of the institutions in order to have an effect in the running of the institutions ( Mallin, 2001).

This theory was relevant to this study since Uganda Colleges of Commerce, Tororo, Aduku and Soroti have employees who are the staff and act on behalf of top management to ensure that the set objectives are achieved where by the top management plays the role of principals through putting internal control systems that will enable Uganda Colleges of Commerce, Tororo, Aduku and Soroti to improve on the financial performance. More so this theory was chosen for this study simply because internal control is one of many mechanisms used in business to address the agency problem (Jensen & Payne, 2003) and also seen as a possibility to reduce institutional costs.

### **1.2.3 Conceptual Background**

The study concepts were; internal control system as an independent variable and financial performance as a dependent variable.

#### **Internal Control Systems**

The core concepts under study were Internal Control systems and Financial Performance. Internal control systems have been established by practitioners and primarily auditors. According to COSO (Committe of Sponsoring Organisation of the Treadway Commission, 2013), an internal control system is defined as a process, stimulated by an organization's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories effectiveness and efficiency of operations, reliability of financial reporting, Compliance with applicable laws and regulations.

The Institute of Chartered Accountant of England and Wales (1998), defines an internal control system as a review of operations and records, sometimes continuously undertaken within a

business by a specially assigned staff. Aldridge and Colbert (1994), looks at internal control system as the process designed and effected by those charged with governance, management and other personnel to provide reasonable assurance about the achievement of the entity's objectives. Internal control can be defined as a set of mechanism designed to motivate an individual or a group towards achievement of a desired objectives ( Kirsch, 2002 ). Internal controls act as strong towers towards corruption and ensures transparency ( Transparency International, 2006). Internal control systems contain five constituents which are the control activities, control environment, risk assessment, the information and communication systems and the monitoring of controls (Nyakundi, Nyamita & Tinega, 2014). However, for purposes of this study, the study focused only three components of the internal control systems which are the information and communication, control environment and control activities. The other components of the internal control systems were held constant.

### **Financial Performance**

Financial performance in this study focused on funds utilization, timely financial reporting, liquidity and accountability only because this is a government institution where performance is not measured looking at indicators that measure profit. Performance measurement is the process of quantifying the efficiency and effectiveness of past action (Illmer, 2011). Financial performance is a measure of institution's strategies and operations in monetary terms. It is a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. Positive financial performance in a firm can be achieved by eradicating waste in benefits services processes and systems. The information obtained from a sound internal control system as reflected from financial statements will provide a report on a firm's financial performance and position that is useful to a wide range of users for assessing the stewardship and making economic decisions (Davies, 2005).

Moreover, it is very important that organizations have fairly summarized accounting information data disclosure (Bamweyana, 2009). Financial performance will be looked at as liquidity, financial Accountability, timely financial Reporting and funds utilization (Kombo & Tromp, 2009). This study is therefore being set to investigate the relationship between internal control systems and financial performance at Uganda College of Commerce, Tororo.

#### **1.2.4 Contextual Background**

The study context was Uganda Colleges of Commerce with specific focus on Tororo which was founded in 1984, Aduku which was founded in 1983 and UCC Soroti which was also founded in 1983. These institutions offer a wide range of programs for study with the goal to produce, develop and promote human resource in business management to meet the challenges in the modern business world. Uganda Colleges of Commerce that is to say; Tororo, Aduku and Soroti offer education and research and grants academic awards at Diploma and Certificate levels in a variety of subjects as guided by the institutions' statutes.

Internal control systems exist at these UCCs and are supposed to be applied in all departments of the institutions involving control activities which are done on a daily, weekly, monthly and annual basis. Some of the internal control measures that exist at these UCCs include; use of local purchase orders to procure goods and services, requisitions raised by user departments, vouchers prepared by the bursars approved by the principals, payments made and receipts obtained, vouchers stamped and filed, fees payments made through the banks, arrival books put in place to monitor staff attendance, use of prequalified service providers, maintenance of creditors and debtors ledger, approved imprest system, preparation of financial statement and preparation of annual budget (Uganda College of Commerce Aduku, Tororo & Soroti Annual Management Reports, 2018).

A code of ethics for staff, financial and procurement manuals are in place to guide on the daily conduct of staff, procurements and other transactions. Further, information and communication is considered key in carrying out projects and organizational activities through promotion and practice of information protection, information source verification and quality information support to staff and other stakeholders ( Isingoma & Erone, 2016 ).

However, despite the existence of internal controls at Uganda Colleges of Commerce, Tororo, Aduku and Soroti there still appears to be many issues that are raised which indicates that the control systems are not effective resulting into poor financial performance.

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

The Audit Reports (2019) indicate that the financial performance of the Uganda Colleges of Commerce especially Soroti, Aduku and Tororo is low. This is evidenced by inadequate liquidity which stood at 21% for Soroti, 26% for Tororo and only 18% for Aduku (UCCs Performance Report, 2019). In addition, it was also observed that there was a delay in complying with timely release of financial statements and there were shortfalls in accountability for financial resources where over 200 million Uganda shillings was misused at the three colleges. These financial performance shortcomings at these colleges may be attributed to weak internal control systems (UCCs Audit Reports 2017). Despite the fact that the UCCs, have tried to implement controls like use of local purchase orders to procure goods and services, requisitions raised by user departments, vouchers prepared by the bursars approved by the principals, payments made and receipts obtained and vouchers stamped and filed, use of prequalified service providers, maintenance of creditors and debtor's ledger, approved imprest system, preparation of financial statements and preparation of annual budgets, there financial performance is still low (UCCs Audit Reports 2019). Therefore, this research set out to examine the effect of internal control systems on financial performance on higher institutions of learning a case of Uganda Colleges of Commerce.

## **1.4 General Objective**

To examine the effect of internal control systems on the financial performance at Uganda Colleges of Commerce.

### **1.4.1 Specific Objectives**

- i. To assess the effect of information and communication on financial performance at Uganda Colleges of Commerce.
- ii. To assess the effect of internal control environment on financial performance at Uganda Colleges of Commerce.
- iii. To analyze the effect internal control activities and financial performance at Uganda Colleges of Commerce.
- iv. To analyze the effect of internal control systems on financial performance of Uganda Colleges of Commerce.

## **1.5 Research Hypothesis**

**H<sub>1</sub>:** There is a significant effect of information and communication on financial performance at Uganda Colleges of Commerce.

**H<sub>0</sub>:** There is no significant effect of information and communication on financial performance at Uganda Colleges of Commerce.

**H<sub>1</sub>:** There is a significant effect of internal control environment on financial performance at Uganda Colleges of Commerce.

**H<sub>0</sub>:** There is no significant effect of internal control environment on financial performance at Uganda Colleges of Commerce.

**H<sub>1</sub>:** There is a significant effect of internal control activities on financial performance at Uganda Colleges of Commerce.

**H<sub>0</sub>:** There is no significant effect of internal control activities on financial performance at Uganda Colleges of Commerce.

**H<sub>1</sub>:** There is a significant effect of internal control systems on financial performance of Uganda Colleges of Commerce.

**H<sub>0</sub>:** There is no significant effect of internal control systems on financial performance of Uganda Colleges of Commerce.

### **1.6 Significance of the Study**

The results of this study will provide detailed information regarding internal control systems and financial performance within the context of higher institutions of learning with focus on Uganda Colleges of Commerce. This may assist financial and non-financial managers to come up with best strategies of dealing with financial performance within their organization to achieve best outcomes.

The study will highlight best practices with regard to internal control systems (control activities, control environment and information and communication) and how these relate and affect financial performance. This may assist managers to make vivid decisions for the effectiveness of their organizations as they serve the stakeholders.

This study will provide information based on Uganda colleges of Commerce and this may act as a reference point to other researchers and academia with regard to exploring internal control systems and financial performance within organizations and other categories of institutions.

This study will fill the existing gap with regard to internal control systems and financial performance within the context of non-profit making institutions or higher institutions of learning. Therefore, it may act as a reference point for any other researchers with regard to internal control systems and performance.



## **1.7 Justification of the Study**

Uganda Colleges of Commerce especially Tororo, Aduku and Soroti have been faced with financial performance challenges since 2014 as evidenced by unclear staff structures, poor asset management and disposal. This has crippled the activities of these institutions in terms of inadequate funds to run the institutions and limited running capital and delayed payment of supplies. Thus, this study was carried out to examine the effect of effective implementation of internal control systems on the financial performance of Uganda Colleges of Commerce.

## **1.8 Scope of the Study**

The scope of the study is presented in the categories of geographical, content and time scope as seen below.

### **1.8.1 Geographical Scope**

The study was conducted at Uganda Colleges of Commerce Tororo located in Eastern Uganda Tororo district in Tororo municipality plot 62-66 along Kampala- Malaba just 3km south East of Tororo town, Aduku located in Apac P.O.Box 84 and Soroti located in Soroti P.O.Box 255 because the research problem currently exists in these UCCs, and this prompted the researcher to undertake the study within these areas to establish how the UCCs manage their internal activities and suggest effective controls and how they relate with the financial performance of the institutions.

### **1.8.2 Content Scope**

The study set out to examine the influence of internal control systems on financial performance at Uganda Colleges of Commerce Tororo, Aduku and Soroti. This was achieved by examining the influence of information and communication, internal control environment, internal control activities and these were chosen because the colleges currently experience challenges that area attributed to inadequate information flow, unfavorable control environment and the internal

control activities are relaxed which has in turn affected the financial performance of the institutions hence the study intended to examine how best these three aspects can be implemented at Uganda Colleges of Commerce Tororo, Aduku and Soroti to yield positive results.

### **1.8.3 Time Scope**

The study focused on reviewing literature between 2000-2018 as the researcher believed that literature was relevant to justify the study and back up the problem statement and was undertaken within a period of six months as this time period was adequate for the researcher to review literature and collect data and analysis to draw conclusions. Collection of data from the field took a period of one month after which analysis and interpretation was done.

### **1.9 Definition of Terms**

**Internal Control Activities:** These are organizational related functions/practices that set out to regulate and guide employee actions and behaviors to achieve set goals and objectives in terms of organizational and clients' perspectives.

**Internal Control Environment:** This refers to a management practice where rules, procedures and regulations are applied to streamline actions and behaviors of employees towards the desired management goals.

**Information and communication:** It refer to use of sound, behaviors and signs to convey a message to a person or group of persons with intent of expression of ideas, feelings and thoughts in a given time period. This also involves upward and downward movement of information in the organization.

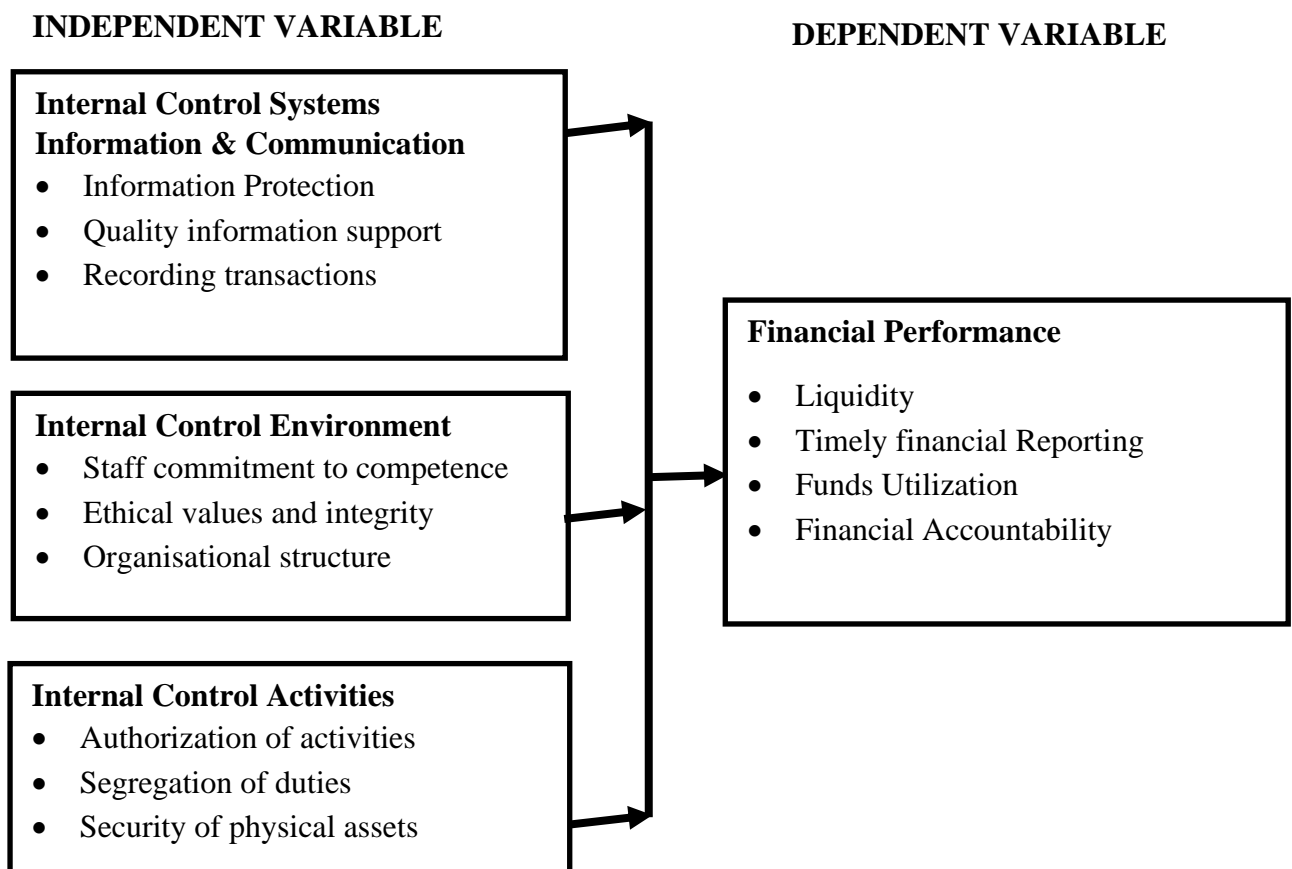
**Internal control systems:** This is a process, stimulated by an organization's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories effectiveness and efficiency of operations,

reliability of financial reporting, Compliance with applicable laws and regulations (Committee of Sponsoring Organisation of the Treadway Commission, 2013).

Financial performance: This is a measure of institution's strategies and operations in monetary terms. It is a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Davies, 2005).

### 1.10 Conceptual Framework

The Conceptual framework of a study explains the systems of concepts, assumptions, expectations and theories that support and informs the research. The figure below illustrates the relationship between internal control systems and financial performance as independent and dependent variables respectively.



**Figure 1.1: Conceptual Framework of internal control systems and financial performance**

*Source* : Adapted and modified from Mawanda (2008); Donald and Delno (2009) and COSO (2013).

The conceptual framework above was built to indicate the relationship between internal control systems and financial performance as independent and dependent variables respectively.

The figure above presented internal control systems as the independent variable operationalized in terms of Information and communication (information protection, recording transactions and quality information support), internal control environment (staff commitment to competence, ethical values and integrity and organisational structure) and internal control activities (Authorization of activities, Segregation of duties and security of physical assets). These were elaborated in details below;

Information and communication; organizations need reliable and timely reliable information both internal and external activities that have an impact on the organisational goals and objectives. Information about the organization's plans, activities, environment and risks that might hinder the effective operation of the activities are supposed to be communicated in a regular manner (Horngren & Datar, 2012). Information helps employees to understand their roles and responsibilities, lines of reporting. Communication is supposed to be both upward and downward as feedback is very important in improving performance. Information and communication can either be formal or informal. Information and communication were measured using information protection and confidentiality, information support systems in terms of backup and recovery coupled with accurate recording of transactions.

Internal control environment is the creation of a conducive environment that enables employees to execute their roles and responsibilities effectively (Bereish, Billings& Hodder, 2008). Control environment was operationalized using ethical values and integrity that simply looks at how employees are supposed to conduct themselves at the place of work and is drafted and communicated by top management through signing of code of conduct whereby when you act contrary to it you are punished, According to Saren& De Belde in Mawanda (2008), when an organization pursues integrity and clear ethical values reflected in a formal code of conduct/ethics,

the internal audit function will take a greater importance. Commitment to competence which requires that every person is in position by capability to do the given assignment and also committed to performance and organisational structure includes the reporting lines, delegation of work and assigning roles and responsibilities.

Internal control activities are policies and procedures put in place to guide the employees on how the given duties are supposed to be carried out with the aim of limiting errors, accountabilities purposes, verifications and approvals (Shelton & Whittington, 2008). This was measured using authorization of activities, segregation of duties among employees and protection of the assets of the company from theft, destruction and misuse of assets. This is done through applying security guards, having a limited number of staff access the essential items and others.

The dependent variable for this study was financial performance, operationalized using the following;

Liquidity; According to Hoskisson, Hitt and Hill (2010), current ratio is defined as a standard measure of liquidity in organizations. Accountability; According to Hayes, Dassen, Schilder(2009), Managers need regular financial reports so as to make informed decisions. Reporting is one way through which managers make accountability for the resources entrusted to them. Whittington and Kurt(2001), talk about the comprehensiveness of internal controls in addressing the achievement of objectives in the areas of financial reporting, operations and compliance with laws and regulations and funds utilization focus on efficient allocation and use of organisational money to achieve the intended objectives.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The review covers what scholars and policy makers have written in respect of internal control systems and financial performance in that it defines the internal control giving features that exist in internal control as well as defining financial performance. This chapter entailed conceptual review, theoretical review, review of related literature about the key parameters under study and finally the literature gap.

#### **2.2 Theoretical review of Principal Agency theory**

This study was guided by The Principal- Agency Theory as put forward by Jensen and Meckling (1976). According to the Theory, a company consists of a link of contracts between the owners of economic resources and managers who are charged with using and controlling those resources (Jensen & Meckling, 1976).

These contracts are used with the intention of ensuring that technocrats who are agents align their own interest with the interest of the institutions of higher learning to achieve its objectives. Government (principal) does not directly promote the achievements of the objectives of the institutions but uses the institutional structures to do so by setting up the government rules and incentives to align the interest of the technocrats to that of the institutions. Institutions advocate having governance structures that separates governance from management. It also emphasizes respect for lines of authority (Deegan & Unerman, 2006).

Furthermore, an assumption of Agency Theory is that principals and agents act rationally and use contracting to maximize their wealth which may lead to moral hazard problem indicating that in an effort to maximize their own wealth, agents may face the dilemma of acting against the interests of their principals (Odongkara, 2016). A consequence of this assumption may be the

moral hazard problem (Jensen & Meckling, 1976) indicating that in an effort to maximize their own wealth, agents may face the dilemma of acting against the interests of their principals.

Agency Theory posits that agents have more information than principals and that this Information asymmetry adversely affects the principals' ability to monitor whether or not their interests are being properly observed by agents. The theory suggests the existence of professional managers to manage different departments on behalf of the owners (Kiel & Nicholson, 2003). The theory argues that good collaboration among leaders has a significant influence on organizational performance and suggests that stakeholders in institutions should have significant powers in the operation of the institutions in order to have an effect in the running of the institutions (Mallin, 2001).

This theory was relevant to this study since Uganda Colleges of Commerce have employees who in this context are the agents that should act on behalf of top management who in this context are the principals to ensure that the set objectives are achieved through putting internal control systems that will enable Uganda Colleges of Commerce to improve on the financial performance. More so this theory was chosen for this study simply because internal control is one of many mechanisms used in business to address the agency problem (Jensen & Payne, 2003) and also seen as a possibility to reduce institutional costs.

## **2.3 Conceptual Review of internal control systems and financial performance**

The conceptual review is presented as per the objectives of the study as seen in the following sub-sections.

### **2.3.1 Internal control systems**

Internal control is a process effected by an organization's board of directors, management, and other personnel designed to provide reasonable assurance regarding the achievement of objectives

in the following categories: reliability of financial reporting, effectiveness and efficiency of operations, compliance with applicable laws and regulations (Stephen, 2003).

Cahill (2006) describes internal control as a system of internal administrative efficiency which often leads to design of a system that will enhance financial check and balance which will support corrective actions intended by management of the organization. These internal control systems may include having policies and procedures for execution of operations and governance of organisational member's behaviors, having clear staff structure for recruitment and competency development of employees, having security measures to guarantee assets management and protection, establishing proper procedures for record keeping, defining reporting relationships among organizational members, establishing procedures for authorization of transactions and the limits thereon as well as top management supervision (Eke, 2018).

### **2.3.2 Financial Performance**

Performance is described as the measurement of actual output of an organization against its expected outputs or goals (Goodwin& Kent, 2006). Due to the compelling needs of organizational certifications, institutions have had to install and implemented effective internal controls to facilitate effective and efficient financial performance. A reliability of financial reporting is depended on the efficiency of internal controls that provide efficiency transactions, effective book keeping and adequate system authorization. In addition, it is imperious that institutions have good disclosure of the summarized accounting information (Bamweyana, 2009). Dixon, Woodhead and Sohliman(2006), stated that when an organization has effective measures of performance, it is able to concentrate on achieving its goals and objectives. Mawanda (2008) poised that it is believed that proper internal controls led to better financial performance, efficient reporting process, more reliable reports and increased financial accountability.



## **2.3 Review of related Literature**

### **2.3.1 Information and Communication and Financial Performance**

Information and communication refer to a process of sending and receiving ideas, thoughts and feelings among people with the intention of utilizing such for action in a specified time period (Feng, & McKay, 2011). Mwachiro (2013), asserts that organisational management activities are divided into functions like planning, organizing, coordination, monitoring reporting and decision making. At the time when managers are exercising the above functions, information flow is a catalyst for successive implementation of activities in an organization. Chen (2004) puts it clear that for the control system to be effective and efficient, there should be relevant and reliable information which should be recorded and communicated to management and other personnel within the organization.

Effective information generates reports enclosing operational, compliance and financial information that enable to run and manage a business (Mwachiro, 2013). These reports contain internal as well as external data, circumstances and actions to enlighten decision making and external reporting (Simmons, 1995). Gaskill (2000) asserts that, information and communication element of internal control allows timely accomplishment of reporting via gathering and communicating significant information within stipulated time. Chen (2004) showed that Information and communication systems give reports containing operational, financial and compliance related information that make it possible to run and control an organization. Woolf (1997) also stated that arithmetic and accounting controls should be implemented as they aim at ensuring accuracy of transactions and ensuring proper recording of company transactions according to the Generally Accepted Accounting Principles (GAAPs). The recording of business transactions should be accurate and arithmetically correct hence some controls are introduced e.g. checking of totals, reconciliations, control accounts and trial balances. An effective control system

therefore requires implementation of arithmetical and accounting controls and its adequacy has to be examined by the internal auditor differently for different firms.

Effective communication should occur in a broad sense with information flowing down, across, and up within all the sections of the organization whereby employees should be in position to understand what has been communicated ( Millichamp, 2005). The information system, including the accounting enables the organization to make appropriate decisions in managing and controlling the activities (Ofori, 2011).

Batra (1992) said that control of documents involves control of company's sensitive documents for example receipts, cheques, local purchase orders, debit and credit notes. These documents must be handled by a responsible officer and should be pre-numbered to ensure control and minimize misuse. They must be kept and controlled from a central point like headquarters or any other reliable control point. Walker, Shenkir and Barton(2003) contended that Information and communication systems or processes support the identification, capture, and exchange of information in a form and time frame that enables people to carry out their responsibilities. Wales (2005) highlighted that reliable and relevant information from both internal and external sources must be identified, captured, processed, and communicated to people who need it in a form and time frame that is useful.

### **2.3.2 Internal control activities and Financial Performance**

Control activities are policies and procedures that help ensure management directives are carried out. They include a range of activities as diverse as approvals, verifications, reconciliations, reviews of operating performance, security of assets and segregation of duties (Committee of Sponsoring Organisation of the Treadway Commission, 2010). Control activities are defined as the set of regulatory and policy frameworks that serve to direct actions and behaviors of

stakeholders-employees towards the achievement of the set objectives of the organization(Muraleetharan, 2013).

Whittington and Kurt (2001) assert that control activities are vital in ensuring that the internal control systems continue to operate as intended they are on-going actions that organizational members take to ensure proper execution of operations and are particularly designed to support accurate, complete and reliable financial transaction processing. Internal control activities are measured as segregation of duties, authorization, supervision, physical controls (security measures), and performance reviews (COSO, 2013).

Woolf (1997), indicated that all transactions must be authorized and approved by the right and responsible officer. This is aimed at preventing frauds, safeguarding the company assets, streamlining the flow of authority to avoid bureaucracy and conflicting authorized activities for example purchases invoices should be approved before payment is made to suppliers, and wages payment be approved before cash withdrawal from the bank. Internal control requires proper system of authorization and approval whose main objective is to prevent fraud and safeguard company assets. De Paula(1990), also noted that internal controls require that business assets like plant and machinery, equipment, motor vehicle, stock and cash should be kept safely and access should be limited to authorized personnel only. The procedures designed and security measures taken to safeguard assets are known as Physical Controls. The type of physical controls common to most companies include employment of watchmen, alarm system, strong electrified fence, strong room, safes and security lights

### **2.3.3 Internal Control Environment and financial Performance**

The American Institute of Certified Public Accountants(1994), defined the control environment as an intangible factor and internal control environment being the foundation for all other components of internal control systems, internal control environment looks at providing discipline

and structure and encompassing both technical competence and ethical commitment. Manager must have (Applegate & Wills, 1999). More to this, control environment is seen as the art of regulating actions and behaviors of internal and external stakeholders in order to achieve positive outcomes in terms of effect from internal controls of the organization (Shafawaty, 2013).

Control environment consists of the governance and management functions as well as the attitudes, awareness and actions of those charged with governance and management towards internal controls and its importance to the organization (COSO, 2013). The control environment sets the tone of an organization, influencing the control consciousness of its people. It is a foundation for all other components of internal control, providing discipline and structure. Factors which are often used to measure the strength and quality of an organization's control environment include: integrity and ethical values; a commitment to competence; management philosophy and operating style; involvement of the board and audit committee; organisational structure; assignment of authority and responsibility; and human resource policies and procedures (COSO, 2013; Whittington & Kurt, 2001).

Hevesi (2005), considered the control environment to be the attitude toward internal control and control consciousness established and maintained by the management and employee of an organization. Organization structure including organization structure settings, responsibilities allocation, what position of the person in the organization is and what power and responsibility he has. Organization structure is the guarantee for the enterprise to achieve overall goal and enterprises should plan, execute, control and supervise based on the structure of the organization (Ofori, 2011).

Spicer & Pegler (1978), stated that the proper functioning of any system depends on the competence and integrity of those operating it. The staff employed in an organization should be competent and experienced. The company should employ qualified, experienced, competent,

motivated and capable people who will have interest in what they do and the company as well should regard their employees as its assets. These employees should be reliable and responsible in order to ensure efficiency in business operations.

#### **2.3.4 Internal Control systems and Financial Performance**

James (2005) showed that internal control helps in bringing surety that organized assignments leads to achieving the set objective as long as the aim is well understood especially in regard to the policy, prompts effectiveness in utilization of organization goods and equipment whereby; occupations are done as clarified by their portrayal, accessibility of workers for work at all times, and fair portion of financial resources.

Kakuru (2001) expressed that conducting business includes various transaction that influence financial management of the firm. Effective internal control system prevents waste and inefficiency in the production line and processes of goods and services. Whittington and Kurt(2001), talk about the comprehensiveness of internal controls in addressing the achievement of objectives in the areas of financial reporting, operations and compliance with laws and regulations. They further note that internal control also includes the program for preparing, verifying and distributing to the various levels of management those current reports and analyses that enable executives to maintain control over the variety of activities and functions that are performed in a large organization.

According to the study by Origa (2015) that was conducted in Kenya to establish the effect of Internal Controls on the Financial Performance of Manufacturing Firms, it was established that firms that invest into effective internal control systems are likely to register an improvement in financial performance. It was also noted that both manufacturing and non-manufacturing firms should endure there is quality management that puts internal controls at the fore front in organizations. Furthermore, the study by Asiligwa and Rennox (2017) that sought to investigate

the Effect of Internal Controls on the Financial Performance of Commercial Banks in Kenya also revealed that banking sector enjoys improvement in financial performance as a results of existence of internal controls with the bank.

#### **2.4 Literature summary and gap**

From the literature review done it was found out that realization of positive financial performance depends on whether firms have Internal Control systems, however, literature notes that non-compliance to the internal control system is one of the major hindrances to the attainment of positive financial performance in higher institutions of learning. There exists a contextual gap where majority of the studies have been conducted in Europe and other parts of the African continent and with very few studies in Ugandan context. Therefore, there was need to examine the relationship between the internal control systems and financial performance in higher institutions of learning in the Ugandan context with specific focus on the Uganda Colleges of Commerce.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter discussed the approaches and techniques used by the researcher when gathering, analyzing and presenting the findings of the study. These included the research design, target population, data collection methods and instruments, validity and reliability, data analysis and ethical considerations.

#### **3.2 Research Design**

The study used a case study design which involves examining the phenomenon at hand and establishing the cause and effect of the occurrence at a single point in time as supported by Saunders, Lewis and Thornhill (2009). This was chosen because it enabled a deep understanding of the existing situation of the current internal control systems being implemented and their influence on the financial performance in Uganda Colleges of Commerce as supported by Yin (2014). The study used mixed approach adopting quantitative and qualitative methods of collection of data. The quantitative approach sought to quantify and examine the influence of internal control systems and financial performance and qualitative approach helped to gain the in-depth explanations on internal control system and how they related to the financial performance as supported by Saunders, Lewis and Thornhill (2009).

#### **3.3 Study Population.**

A population has been defined as the total collection of elements about which inferences are made and refers to all possible cases which are of interest for a study (Sekaran & Bougie, 2010). The study population was 123 administrative staff from the three institutions of Tororo, Aduku and Soroti (UCCs' HR records, 2018). The study population is based on various categories like finance departments, Management teams, procurement and administration. These were considered for the study because of their personal experiences with the internal control systems

in place at UCCs of Tororo, Soroti and Aduku and relationship with financial performance and were directly involved as organizers, users, judges, coordinators of internal control systems at the UCCs.

### 3.4 Sample Size and Procedure

The study considered a sample size of 120 respondents based on Krejcie & Morgan(1970) sampling guidelines as detailed in table below.

**Table 3. 1: Population Category and Sample Size**

Category	Population	Sample	Sampling technique
Finance department- Tororo	5	5	Census
Finance department- Aduku	5	5	Census
Finance department- Soroti	5	5	Census
Management team- Tororo	10	10	Census
Management team- Aduku	10	10	Census
Management team- Soroti	10	10	Census
Procurement administration- Tororo	& 6	6	Census
Procurement administration- Aduku	& 6	6	Census
Procurement administration- Soroti	& 6	6	Census
User departments- Tororo	20	19	Simple random
User department-Aduku	20	19	Simple random
User departments- Soroti	20	19	Simple random
<b>Total</b>	<b>123</b>	<b>120</b>	

**Source:(UCC's HR Reports, 2018)**



### **3.5 Sampling Technique**

The study used census sampling to select respondents from the top management, finance and procurement departments of the three selected colleges. This technique was chosen because of the few number of respondents in the population and as a result every member in the population was selected. This study also used simple random sampling to select respondents from user departments where by every member of the population had equal chance of being selected (Amin, 2005).

### **3.6 Data Collection methods**

The study used both questionnaire and interview to support in collection of both quantitative and qualitative data.

#### **3.6.1 Questionnaire method**

The questionnaire method was used to collect quantifiable primary data from the selected respondents. The study developed questionnaires containing a list of questions that were presented in the five Likert scale of 1-5. The questionnaires were then issued to all the 120 respondents in their different categories where the respondents recorded their answers within closely defined alternatives. The choice of the questionnaire was on the basis of ease in administration, analysis and cost-effectiveness in terms of time and money (Sekaran& Bougie, 2010). The questionnaire was useful in collecting information on perceptions since the variables of internal control systems were not observed or reliably reviewed from secondary data.

#### **3.6.2 Interview method**

This method involved face to face interaction between the researcher and the respondents. An interview guide was developed with a list of guiding questions to enable probing of in-depth information from the targeted respondents as suggested by Sekeran and Bougie (2010). The researcher interviewed 10 staff from top management and senior personnel.

### **3.7 Data Collection Instruments**

The study used questionnaires and interview guide as the main instruments for data collection in the study.

#### **3.7.1 Self-administered Questionnaire**

The study used close-ended self-administered questionnaire divided into sections of background information, internal control systems and financial performance. Questionnaires offer an objective means of collecting information about people's knowledge, beliefs, attitudes and behavior. In this research, a questionnaire was developed through three stages namely; drafting process, piloting stage and finalizing stage. Drafting stage was based on the literature. The data for the study was collected through the administration of questionnaire to respondents. All the sets of questionnaires contained closed-ended questions. The closed ended questions enabled the researcher to specifically direct the respondents towards the desired responses. The questionnaire was scored on a five-point Likert scale of 5- Strongly Agree; 4- Agree; 3- Not Sure; 2- Disagree; and 1- Strongly Disagree.

#### **3.7.2 Interview Guide**

The interview guide was developed comprising of semi structured questions where respondents who were key informants were asked a question and given time to respond verbally as this allowed the researcher to record the conversation. The interview guide focused on areas of internal control systems dimensions of information and communication, internal control activities and internal control environment and financial performance. This was done to supplement the quantitative findings and probing further to understand the internal control systems and financial performance.

### **3.8 Measurement of variables**

Internal control systems were conceptualized as information and communication, internal control activities and internal control environment based on COSO, 2013 which was also the basis for

interpretation of internal control systems. Financial performance was measured based on timely financial reporting, financial accountability, liquidity and Funds utilization. These were then channeled into observable and measurable elements to enable the development of an index of the concept. A five-point Likert scale ranging from (5) for strongly agree, (4) for agree, (3) for not sure (2) disagree, (1) strongly disagree will be adopted.

### **3.9 Data collection procedure**

After successful defense of the proposal, an introductory letter from graduate school of Kyambogo University was used to seek permission to conduct the study at UCC, Tororo, Aduku and Soroti. Anonymity and confidentiality of the respondents was observed by not asking the respondents to put their names on the questionnaires as this increased confidentiality. Collected data was checked for its completeness and there after entered into SPSS in preparation for analysis.

### **3.10 Validity and Reliability**

#### **3.10.1 Validity**

The validity of the instruments was tested using the Content Validity Index. This involved judge scoring the relevance of the questions in the instruments in relation to the study variables and a consensus judgment given on each variable taking only variables scoring above 0.70 as supported by Nunnally and Bernstein (1994).

$$\text{CVI} = \frac{\text{Total number of items declared valid}}{\text{Total number of item}}$$

A face validity was used where items included in the questionnaire were derived from previous empirical studies as those that were found to explain the construct variables well. For further analysis after collection of data, convergent and construct validity tests were conducted for the research variables. To demonstrate convergent validity, magnitude of the structural relationship

between the item and the latent construct (factor) should be statistically different from zero (Smith, Gildeh, & Holmes, 2007). Construct validity being the extent to which a particular item relates to other items measuring the same variable were examined using factor analysis. All the factor loadings were greater than the cutoff point of 0.50, as recommended by Nunnally (1978), this shows strong convergent validity and thus all the items above the threshold were considered for final study as shown below;

### **3.10.2 Reliability**

According to Cooper and Schindler (2008) a pre-test is a small-scale kind of research projects that collects data from respondents similar to those that were used in the actual study. The aim of a pre-test was to act as a guide to examine specific aspects of research to see if the selected procedures worked as intended. A pre-test is meant to test for clarity and understanding of questions to test if the questions yield as expected.

The questionnaire was subjected to overall reliability analysis of internal consistency. This was measured using Cronbach alpha as a coefficient of internal consistency (Nunnally & Bernstein, 1994). Internal consistency measures the correlations between different items on the same test (or the same subscale on a larger test) and whether several items that propose to measure the same general construct produce similar scores. The study only considered variables scoring above 0.70 as suggested by Nunnally and Bernstein (1994) and the findings.

**Table 3. 2: Reliability of the research variables**

<b>Variable</b>	<b>No. of items</b>	<b>Cronbach Alpha</b>
Financial Performance	8	0.939
Information & Communication	8	0.885
Internal Control Environment	6	0.859
Internal Control Activities	5	0.857

*Source: Primary data 2020*

The Cronbach's alpha coefficients from Table 3.2 were all above the threshold of 0.70 which implied that questionnaire was reliable for data collection as supported by Nunnally and Bernstein (1994).

### **3.11 Data Analysis**

The study used both quantitative and qualitative analysis since both quantitative and qualitative data was collected.

#### **3.11.1 Quantitative Analysis**

Data processing involved translating the response on the questionnaires into a form that was manipulated to produce statistics and meaningful information. This involved coding, editing, data entry, and monitoring the whole data processing procedure. After quantitative data was obtained through questionnaires, it was prepared in readiness for analysis by editing, handling blank responses, coding, categorizing and keyed into statistical package for social sciences (SPSS) computer software for analysis.

Descriptive statistics were used to analyze background information of the respondents and respondents' perception of internal control systems in UCCs. These were in form of frequencies, percentages, mean and standard deviation. The inferential statistics in form of regression analysis was used to address the study objectives that sought to establish influence of internal control

systems on financial performance of UCCs. The choice and justification of using linear regression model was that it is useful in testing the causal/effect relationship between internal control systems and financial performance as supported by (Creswell, 2000).

### **3.11.2 Qualitative Analysis**

The study used content analysis technique to analyze qualitative data where themes identified in the respondent's narratives on internal control systems was analyzed for their implications, inferences and conclusions.

### **3.12 Diagnostic tests**

Diagnostic tests were conducted to test for normality of the data and ensure that there was no element of multi-collinearity among variables.

#### **3.12.1 Normality tests**

In the study, normality tests were carried out to test the normal distribution of the data before analysis. The Shapiro – Wilk Test was formed to test for normality in the study. This test is deemed appropriate for samples that fall between 7 and 2,000 Shapiro and Wilk (1965) and for samples that fall between 2,000 and 5,000 the Kolmogorov – Smirnov test is deemed Appropriate. (James, Witten, Tibshirani, & Hastie, 2012; Shapiro & Wilk, 2015). The Table 3.3 below shows the results corresponding to the Shapiro Wilk test for normality for the different variables used in the study.

**Table 3. 3: Tests of Normality for Financial Performance, Information and communication, Internal control Environment and Internal Control Activities**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Financial Performance	.204	102	.000	.918	102	.000
Information & communication	.101	102	.012	.969	102	.017
Internal Control Environment	.131	102	.000	.960	102	.004
Internal Control Activities	.148	102	.000	.962	102	.005

**Source: Primary data 2020**

The results in Table 3.3 indicate that the data was normally distributed with all variables showing P-value <0.05 as proposed by Shapiro and Wilk (2015) that the test results that show significance implies the data is normally distributed.

### **3.12.2 Collinearity tests**

Multi-collinearity tests were also carried out to test for collinearity of the independent variables used in the study. Collinearity occurs when two or more independent variable constructs used in the study are highly correlated with each other (Hair, Ringle, & Sarstedt, 2013).

**Table 3. 4: Collinearity diagonistics for Information and communication, Internal Control Environment and Internal Control Activities**

Model	Collinearity statistics	
	Tolerance	VIF
Information and communication	.519	1.939
Internal Control Environment	.478	2.090
Internal Control Activities	.433	2.307

a. Dependent Variable: Financial Performance

Multicollinearity was assessed by computing the Variance Inflation Factor (VIF), which measures how much the variance of a regression coefficient is inflated due multicollinearity in the model (Hair et al., 2013). The higher VIF meant that multi-collinearity effects are present. Hair, Anderson, Tatham, Black, Babin and Anderson (2010) stated that a problem of multi-collinearity is present if the factor is greater than 10.

### 3.13 Ethical Considerations

As part of the ethical considerations, the researcher used an introductory letter from graduate school of Kyambogo University to seek permission to conduct the study in UCC, Tororo, Aduku and Soroti. The respondents were asked for their consent and not to indicate their names on the questionnaire so as to instill confidentiality among the respondents. The other ethical issues that was observed throughout the research process included: voluntary participation and fairness on the respondents. This means that if any respondent felt uncomfortable to continue on the research was allowed to step down. The researcher also ensured that the data collected was treated with utmost confidentiality and was used for purposes of the research only. The final report was defended at Viva before a panel constituted by doctors and professors in this area.



### **3.13 Limitation of the Study**

Resources restraints to acquire stationery, transport, and printing costs as of being a student and not having enough finance to effectively carryout the study. This was solved by working with the planned budget and for the case of stationery and printing.

Inadequate Time: The researcher also realized that the research project was constrained by time from January -June 2020 to explore the research problem and to collect data and make analysis. To overcome this problem however, the researcher set aside evening hours from work daily to concentrate on the research.

Slow reply of the respondents was expected since some of the respondents claimed to be busy or not having time to fill the questionnaires and have a session of interviews and others not available at all. A friendly approach was opted when dealing with the respondents in order to avert this problem and they were reminded so often and also respondents were given enough time like 2-3 days to fill the questionnaires and a scheduled timetable for interviews were drafted depending on the availability and convenience of the respondents. Additionally, an introductory letter from graduate school of Kyambogo university was used.

Confidentiality: also, some respondents most especially the top management of UCC, Tororo, Soroti and Aduku may deliberately rejected and resisted to participate in this study claiming that they may be accused of releasing confidential information to the public and this was solved by drafting the questionnaires in a way that the respondents don't record their names or personal information as they remained anonymous and were assured that the research is for study purposes only.

Finally, since information pertaining internal control system and financial performance of any organization is challenging to obtain since they are regarded as sensitive issues which cannot be

provided without caution. However, a case study design was used to gain in depth understanding of the existing phenomenon in UCC, Tororo, Aduku and Soroti.

The outbreak of the COVID 19 pandemic disorganized meeting of my supervisors and resulted into closure of the University which limited my progress in the research project but this was solved through talking to my supervisors and they agreed to use email supervision that helped me to progress in my research project.

## **CHAPTER FOUR**

### **ANALYSIS, PRESENTATION AND INTERPRETATION OF THE FINDINGS**

#### **4.0 Introduction**

This chapter presents the analysis and interpretation of the study and its findings arising from the data collected from the field using questionnaires and interview guide. This chapter represents and discusses the findings of the study. The chapter also presents the analysis and interpretation of the results. The presentation is done according to the specific objectives and hypotheses of the study. The first section presents the response rates, the second section presents the background information, and the third descriptive statistics, forth looks at correlation analysis and the last part handles empirical findings from the multiple linear regression on the study objectives.

#### **4.1 Response Rate**

A total of 120 questionnaires were issued but 102 usable questionnaires were returned in time for consideration in the study giving a response rate of 85%. A total of 5 interviews were arranged with key informants of the study and were successfully conducted. The results are therefore a good representation of the population from which the sample was selected.

#### **4.2 Background Information about the Respondents**

This sub section presents the findings on gender, level of education, period of service at a UCC and department of service as these are key determinants of perceptions of internal control systems and financial performance of institutions of higher learning in Aduku, Soroti and Tororo.

**Table 4. 1: Demographic Characteristics of respondents**

Demographic feature		
Gender	Frequency	Percentage
Male	62	60.8
Female	40	39.2
Total	102	100
Period of service	Frequency	Percentage
Less than one year	2	2.0
1-5 years	45	44.1
6-10 years	23	22.5
Over 10 years	32	31.4
Total	102	100
Highest level of Education	Frequency	Percentage
Postgraduate	27	26.5
Degree	47	46.1
Diploma	21	20.6
Higher National Diploma	2	2.0
Other college education	5	4.9
Total	102	100
Department of Service	Frequency	Percentage
Registry	5	4.9
ICT	6	5.9
Estates	4	3.9
Teaching	57	55.9
Administration	11	10.8
Others	19	18.6
Total	102	100

**Source: Primary data (2020)**

Table 4.1 above reveals that 60.8% of the respondents were males and 39.2% were female. This could indicate that the UCCs of Tororo, Aduku and Soroti employs more of male than women. The findings represent the views of both gender about internal control systems and financial

performance in institutions of higher learning. This was necessary for the study to get a balanced picture of the respondents' views.

In the table above, it was revealed that respondents who were bachelor's degree holders were 46.1% which ranked the highest percentage, followed by postgraduate with 26.5%, Diploma with 20.6%, other college education with 4.9% and finally higher national diploma with 2.0%. This indicates that the respondents were knowledgeable enough to understand and interpret the items measuring both the independent and dependent variables of the study. This depicts that the respondents were well educated and informed and therefore furnished this study with better information which added value.

The Table further shows that 44.1% of the respondents had worked in the UCCs for a period of 1-5 years. This was followed by 31.4% of respondents who had worked for over 10 years, 22.5% had been there for a period of 6-10 years and those who had serviced for less than a year were 2.0%. This showed that the employees had attained a reasonable amount of experience and balance which could be sufficient for them to understand how the internal control systems influence financial performance.

The analysis results in table above show that majority of respondents in this study were from the teaching departments (55.9%), followed by those who were from other departments likes stores with 18.6%, followed by administration (10.8%), ICT with 5.9%, registry with 4.9% and lastly estates with 3.9%. This reveals that the majority of the respondents in this study were those directly responsible for or directly involved the implementation of the Internal Control System. Therefore, their responses are deemed to reflect what actually takes place in the institutions.

#### **4.3 Descriptive statistics of the variables included in the study**

This section consists of the descriptive statistics of the variables under study. The variables of the study whose descriptive statistics were computed included the internal control systems as the

independent variable (information and communication, internal control environment and internal control activities) and financial performance as the dependent variable. The statements on the variables were rated basing on a five-point Likert scale ranging from strongly disagree to strongly agree.

#### **4.3.1 Descriptive finding on Information and communication at Uganda Colleges of Commerce**

The constructs for information and communication studied were based on information protection, quality information support and recording transactions. The descriptive statistics shows the percentages, mean and standard deviation of the statements on the level of information and communication. A mean result of  $>3.56$  Suggests a high level of acceptance of information and communication being in place while that below 3.56 indicates a low-level perception on Information and communication by respondents.

**Table 4. 2: Descriptive results for Information and communication**

Information and communication statement	SA	A	NS	D	SD	Mean	St. Dev
	Percentages						
1. The imprest system is in place and reconciled often	6.9	37.3	28.4	20.6	6.9	3.12	1.054
2. All procurements received are counted and inspected before being recorded	17.6	42.2	18.6	17.6	3.9	3.52	1.096
3. At the receipt of every procurement, receiving documents are matched with purchase orders and invoices before payments are made	18.6	38.2	24.5	16.7	2.0	3.55	1.040
4. Accounting records are maintained on a periodic basis	20.6	44.1	19.6	9.8	5.9	3.64	1.097
5. Documents are verified by the bursar of the institution	22.5	48.0	15.7	11.8	2.0	3.77	.994
6. All accounting records are properly retained for accountability	30.4	35.3	17.6	13.7	2.9	3.76	1.118
7. Information is accessed with the consent of senior management approval	5.9	42.2	22.5	19.6	9.8	3.15	1.112
8. Institution's documents are handled by only authorized personnel	34.3	44.1	10.8	9.8	1.0	4.01	.969
<b>Average mean= 3.56</b>							

*Source: Primary data (2020) n = 102*

To analyze the findings, respondents that strongly agreed and those who agreed were combined in one category of those who approved with the item. In addition, respondents who strongly disagreed and those who disagreed were combined in one category of those who opposed the items. Another category of respondents was those who neither agree nor disagree not sure with the item. Thus, the three categories of respondents were compared. Interpretation was then drawn from the comparison of the three categories as shown below.

From the above Table 4.2, it is evident that institution's documents are handled by only authorized personnel as indicated by the highest mean of 4.01 and standard deviation of 0.969 with 78.4% of respondents in agreement. The study found out that documents are verified by the bursar of the institution as shown by a mean of 3.77 and standard deviation of .994 where 70.5% agreed, all accounting records are properly retained for accountability since majority of the respondents (65.7%) were in agreement with the statement (mean= 3.76). The findings indicated that the accounting records are maintained on a periodic basis as shown by a mean of 3.64 and standard deviation of 1.097 with 64.7% of respondents in agreement. All the above statements were above the average mean of 3.56 implying that the respondents agreed with these statements in measuring information and communication by attaching much importance as compared to other statements used to measure information and communication in UCCs.

The above analysis was backed up by the qualitative analysis where Human Resource Manager (HRM) for Soroti College commented that;

*“Only authorized or delegated personnel in this UCC are supposed to do accounting documentation. All accounting documents requesting for payments are first verified by the authorized personnel before payment is done, where in absence of the bursar either payment waits or a person delegated by the bursar does the verification. Unverified documents are not worked on.”* (HRM)

But when asked about information flow in the institution, Head of Department (HOD) from Tororo UCC noted that;



*“We rarely get instant communication from our heads of department about current issues and feedback about our financial performance is rarely provided creating a gap in improvement.” (HOD)*

However, the following statements were below the average mean. The findings revealed that most of the respondents were in disagreement that at the receipt of every procurement, receiving documents are matched with purchase orders and invoices before payments are made as indicated by a mean of 3.55. The highest proportion of respondents did not support the view that all procurements received are counted and inspected before being recorded as shown by a low-level mean of 3.52 and standard deviation of 1.096. The findings indicated that information is not accessed with the consent of senior management approval as indicated by a low-level mean of 3.15 and standard deviation of 1.112. Lastly, the study found out that the imprest system is not in place and reconciled often as shown by a low-level mean of 3.12 with a standard deviation of 1.054.

Interviews were further conducted to verify the quantitative analysis above as some respondents were asked to comment about recording of transactions, the Head of Finance (HOF) asserted that;

*“There is no visibility of what’s taking place in procurement hence we end up paying without acknowledging receipt of the procurement. Procurement and accounts department should work together to avoid double payment and payment without delivery.”(HOF)*

#### **4.3.2 Descriptive finding on Internal Control Environment at Uganda Colleges of Commerce**

The items on internal control environment were measured using items scored on a five-point Likert scale ranging from 5= Strongly Agree, 4= Agree, 3= Not Sure, 2= Disagree, and 1= Strongly Disagree. A mean result below 3.17 suggests low level internal control environment acceptance while a mean result of >3.17 suggests a high level of acceptance of internal control environment on a particular item of the variable.

**Table 4. 3: Descriptive results for Internal Control Environment**

	SA	A	NS	D	SD	Mean	Std. Dev
	Percentages						
1 Staff appraisals are implemented to identify incompetent staff that require training	6.9	34.3	19.6	22.5	16.7	2.92	1.232
2 Ethical values are upheld in all management decisions	8.8	32.4	30.4	15.7	12.7	3.09	1.161
3 Codes of conduct exist in the institution	11.8	49.0	13.7	16.7	8.8	3.38	1.160
4 The institution has a clear staff structure for recruitment and competency development of staff	9.8	39.2	19.6	20.6	10.8	3.17	1.186
5 Our staff are reliable and responsible	16.7	48.0	16.7	10.8	7.8	3.55	1.131
6 Routine and automatic checks are in place in finance	7.8	28.4	30.4	15.7	17.6	2.93	1.213
<b>Average Mean = 3.17</b>							

**Source: Primary data (2020)**

To analyze the findings, respondents that strongly agreed and those who agreed were joined in one set of those who approved with the item. In addition, respondents who strongly disagreed and those who disagreed were joined in one set of those who opposed the items. Another set of respondents was those who neither agree nor disagree not sure with the item. Thus, the three sets of respondents were compared. Interpretation was then drawn from the comparison of the three sets as shown below.

The majority of the respondents were in agreement that the staff of UCC are reliable and responsible as indicated with the highest mean score of 3.55 and standard deviation of 1.131. The findings showed that the codes of conduct exist in the institution as with a high-level mean of 3.38 and standard deviation of 1.160 where 60.8% of the respondents were in agreement. The

institution was found to have a clear staff structure for recruitment and competency development of staff as indicated with a mean of 3.15 and standard deviation of 1.186. All the above items were above the average mean implying that the respondents put much weight to these items in terms of measuring internal control environment as compared to other items.

However, the study found that ethical values are not upheld in all management decisions at UCC as shown by a low-level mean of 3.09 and standard deviation of 1.161. Routine and automatic checks were found not to be in place in finance as shown by a mean of 2.93 and standard deviation of 1.213. In addition, the study revealed that staff appraisals are not implemented to identify incompetent staff that require training since majority of the respondents were not in support of the argument (mean =2.92, standard deviation =1.232). All the items listed above were below the average mean of 3.15. The implication is the respondents agreed that these items measured internal control environment but didn't attach much weight as compared to those that were above the average mean.

From the interviews conducted these were the key issues pointed out on internal control environment as Human Resource Manager (HRM) for Tororo College affirmed that;

*“The institution has policies and procedures that drive action. Quarterly the staff are evaluated to assess their performance and identify whether there exist gaps that require further education. However, the institution has no clear approved staff structure from public service therefore sometimes recruitment is constrained which put a lot of burden on the existing staff in terms of students to be attended to.” (HRM)*

#### **4.3.3 Descriptive findings on Internal Control Activities in Uganda colleges of Commerce**

The Internal Control activities were measured using items scored on a five-point Likert scale ranging from 5= Strongly Agree, 4= Agree, 3= Not Sure, 2= Disagree, and 1= Strongly Disagree. A mean result below 3.49 suggests low internal control activities acceptance while a mean result of >3.49 suggests a high level of acceptance of Internal Control Activities on a particular item of the variable.

**Table 4. 4: Descriptive results for Internal Control Activities**

	SA	A	NS	D	SD	Mean	Std. Dev
	Percentages						
1 Approval and authorization are properly documented and referred to	13.7	53.9	15.7	10.8	5.9	3.59	1.047
2 Internal Control system safeguards assets against unauthorized acquisition.	16.7	44.1	18.6	14.7	5.9	3.51	1.115
3 Security system identifies and safeguard institutional assets	13.7	47.1	19.6	9.8	9.8	3.45	1.148
4 The assets are secured and belong fully to the institution	17.6	49.0	12.7	14.7	5.9	3.58	1.121
5 Access of institutional assets is limited to authorized personnel	12.7	45.1	14.7	15.7	11.8	3.31	1.227
<b>Average mean=3.49</b>							

**Source: Primary Data (2020).**

The findings from the study revealed that approval and authorization are properly documented and referred as indicated with the highest mean score of 3.59 and standard deviation of 1.047 where 67.6% of the respondents were in agreement. The study established that the assets of UCC are secured and belong fully to the institution as indicated with a high-level mean of 3.58 and standard deviation of 1.121 where 66.6% of the respondents were in agreement. The internal Control system of UCC was revealed to safeguard assets against unauthorized acquisition as indicated by a high-level mean of 3.51 and standard deviation of 1.115 where 60.8% of the respondents agreed.

However, the study established that the security system does not identify and safeguard institutional assets as shown by a low-level mean of 3.45 and standard deviation of 1.148. Finally, it was found out that access of institutional assets is not limited to authorized personnel as shown by a mean of 3.31 below the threshold mean and standard deviation 1.227.

The above analysis was confirmed by the interviews that were held with some respondents. When asked to comment about overseeing and supervising of duties by senior staff,

From the interview the Head of Department for Aduku College said that;

*“All subordinates are supervised in the roles assigned to them to ensure that the institution meets the set goals. Every staff is aware of their roles and responsibilities as this helps to avoid conflicts and crashing among workers.”*(HOD)

When asked about the institution’s asset security, the Procurement Officer (PO) said that;

*“When the institution buys an asset say computer, its labelled and only used for executing the institution activities. Therefore, staff are not allowed to use them off campus and once you are using it the institution has to be aware of it.”* (PO)

#### **4.3.4 Financial performance in Uganda colleges of Commerce**

This is the dependent variable where items were scored on a five-point Likert scale ranging from 5= Strongly Agree, 4= Agree, 3= Not Sure, 2= Disagree, and 1= Strongly Disagree. A mean result below 3.5 suggests low financial performance acceptance while a mean result of >3.5 suggests a high level of acceptance of financial performance on a particular item of the variable.

**Table 4. 5: Descriptive results for Financial Performance.**

	SA	A	NS	D	SD	Mean	St.
	Percentages						Dev
1. Internal control system leads to improved accountability in the institution.	21.6	42.2	14.7	13.7	7.8	3.56	1.199
2. Proper internal control activities enables to account for the expenditure conducted	21.6	44.1	9.8	15.7	8.8	3.54	1.240
3. Internal control system in place enables effective audit to be undertaken	22.5	39.2	17.6	12.7	7.8	3.56	1.199
4. Proper financial management of the institution enables proper running of the institution	21.6	44.1	11.8	13.7	8.8	3.56	1.223
5. Internal control system enables the institution to collect revenue from students	27.5	41.2	11.8	10.8	8.8	3.68	1.236
6. Timely reporting enables proper planning of the institution	20.6	44.1	12.7	16.7	5.9	3.57	1.165
7. Internal controls enable budgeting of the institution	15.7	46.1	20.6	13.7	3.9	3.56	1.039
8. The internal control system leads to proper management of funds	19.6	37.3	18.6	15.7	8.8	3.43	1.222
<b>Average mean= 3.56</b>							

**Source: Primary data (2020)**

To analyze the findings, respondents that strongly agreed and those who agreed were joined in one set of those who approved with the item. In addition, respondents who strongly disagreed and those who disagreed were joined in one set of those who opposed the items. Another set of

respondents was those who neither agree nor disagree not sure with the item. Thus the three sets of respondents were compared. Interpretation was then drawn from the comparison of the three sets as shown below.

The findings show that the internal control system enables the institution to collect revenue from students as shown with a high-level mean of 3.68 and standard deviation of 1.236 where 68.7% of the respondents were in agreement. In terms of timely reporting, the study revealed that timely reporting enables proper planning of the institution as indicated by a high-level mean of 3.57 with a standard deviation of 1.165 with 64.7% of the respondents in agreement. The study established that internal controls enable budgeting of the institution as indicated by a high-level mean of 3.56 and standard deviation of 1.039 as well as 61.8% of the participants were in agreement.

Furthermore, proper financial management of the institution enables proper running of the institution since majority of the respondents were in agreement (65.7%) with the statement and also as indicated by a high-level mean of 3.56 and standard deviation of 1.223. Internal control system in place enables effective audit to be undertaken as shown by a high-level mean of 3.56 and a standard deviation of 1.199 with 61.7% respondents agreeing. Internal control system leads to improved accountability in the institution and this is evident from a bigger mean of 3.56 and standard deviation of 1.199 where 63.8% were in agreement. However, proper internal control activities do not enable to account for the expenditure conducted as shown by a low-level mean of 3.54, standard deviation of 1.240. Lastly, the study found out that the internal control system does not lead to proper management of funds with a low-level mean of 3.48 and standard deviation of 1.222.

#### **4.4 Relationship between the study variables**

In order to determine the relationship between information and communication, internal control environment, internal control activities, and Financial Performance at UCCs in Tororo, Aduku

and Soroti, correlation analysis was conducted. Pearson correlation coefficient (r) was used to determine the strength of the relationship between the study variables. The findings are presented below.

**Table 4. 6: Multivariate correlation analysis between the study variables**

**Correlations**

Variables		1	2	3	4
Information and communication (1)	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	102			
Internal control environment (2)	Pearson Correlation	.615**	1		
	Sig. (2-tailed)	.000			
	N	102	102		
Internal control activities (3)	Pearson Correlation	.661**	.691**	1	
	Sig. (2-tailed)	.000	.000		
	N	102	102	102	
Financial performance (4)	Pearson Correlation	.577**	.518**	.639**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	102	102	102	102

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

*Source: Primary Data (2020).*

Table 4.6 above shows the there was a positive moderate and significant relationship between Information and communication (r=0.577, P<0.01), Internal control environment (r=0.518, P<0.01), Internal control activities (r=0.639, P<0.01) and financial performance at UCCs of Tororo, Aduku and Soroti. The findings also show that there was no multicollinearity between the independent variables of the study as indicated by correlation values below 80%.



## **4.5 Regression analysis**

In order to address the study objectives and to test the study hypotheses, the study adopted regression analysis. This supported to determine the contribution of independent variables on dependent variable of this study. The findings are therefore presented in the following sub sections below.

### **4.5.1 The effect of information and communication on financial performance of UCCs**

The first objective of the study sought to establish the effect of information and communication on financial performance of UCCs. The hypothesis that was adopted for testing stated that there is no significant influence of information and communication on financial performance of UCCS. Therefore, in order to address this, the study conducted linear regression analysis as observed in Table below.

**Table 4. 7: Regression results on the effect of information and communication on financial performance.**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.577 <sup>a</sup>	.333	.327	.81831

a. Predictors: (Constant), Information and communication

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.494	1	33.494	50.020	.000 <sup>b</sup>
	Residual	66.963	100	.670		
	Total	100.457	101			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Information and communication

**Coefficients<sup>a</sup>**

Model		Unstandardized		Standardized		Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta	t	
1	(Constant)	.952	.377		2.523	.013
	Information and communication	.729	.103	.577	7.072	.000

a. Dependent Variable: Financial performance

**Source: Primary data**

From the results in Table 4.7 above, the ANOVA shows F-value of 50.020 and P-value of 0.000 which is less than 0.05 implying that the model was a good fit and statistically significant hence, information and communication has a significant influence on financial performance of UCCs. Furthermore, the regression model summary shows an adjusted R squared of 0.327 which is approximately 32.7%. This implies that 32.7% of the variations in financial performance is explained by information and communication system whereas 67.3% of the variations are explained by other factors that were not included in this study.

From the coefficients, the findings of the study revealed that an increase in information and communication system by one unit, there would be an improvement in financial performance by 0.729 (Beta =0.729). This therefore, presents the regression model;  $FP = 0.952 + 0.729 IC$  where; FP = Financial performance and IC = Information and communication systems

As a result, the study rejected the null hypothesis that stated that there is no significant influence of information and communication systems on financial performance in support of the alternative hypothesis that states that information and communication has a significant influence on financial Performance.

The above finding was confirmed by the interviews that were held with Head of Finance (HOF) of Aduku College who when asked to comment about the influence of information and communication on financial performance had this to say;

*“The college has consistently worked towards improving information and communication within the institution. We have structured communication lines from top management to the lower level employees as a means of ensuring internal controls where everyone is aware of whom he or she is reporting to in respective departments. This continuous improvement over years has seen our financial performance improve by a small margin because any form of misuse of funds is communicated and I believe that continuous improvement will definitely support to raise our financial performance in the nearby future.” (HOF)*

#### **4.5.2 The effect of internal control environment on financial performance of UCCs**

The first objective of the study sought to establish the effect of internal control environment on financial performance of UCCs. The hypothesis that was adopted for testing stated that there is no significant influence of internal control environment on financial performance of UCCS. Therefore, in order to address this, the study conducted linear regression analysis as observed in Table below.

**Table 4. 8: Regression results on the effect of internal control environment on financial performance.**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.518 <sup>a</sup>	.269	.261	.85720

a. Predictors: (Constant), Internal control environment

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.978	1	26.978	36.715	.000 <sup>b</sup>
	Residual	73.479	100	.735		
	Total	100.457	101			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Internal control environment

**Coefficients<sup>a</sup>**

Model		Unstandardized		Standardized		Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta	t	
1	(Constant)	1.742	.311		5.599	.000
	Internal control environment	.572	.094	.518	6.059	.000

a. Dependent Variable: Financial performance

**Source: Primary data**

From the results in Table 4.8 Above, the ANOVA shows F-value of 36.715 and P-value of 0.000 which is less than 0.05 implying that the model was a good fit and statistically significant hence, internal control environment has a significant influence on financial performance of UCCs.

Furthermore, the regression model summary shows an adjusted R squared is 0.261 which is approximately 26.1%. This implies that 26.1% of the variations in financial performance is explained by internal control environment whereas 73.9% of the variations are explained by other factors that were not included in this study.

From the coefficients, the findings of the study revealed that an increase in internal control environment by one unit, would result into an improvement in financial performance by 0.572 (Beta =0.572). This therefore, presents the regression model;  $FP = 1.742 + 0.572 ICE$  where; FP = Financial performance and ICE = Internal control environment

As a result, the study rejected the null hypothesis that stated that there is no significant influence of internal control environment on financial performance in support of the alternative hypothesis that states that internal control environment has a significant influence on financial Performance. The above finding was confirmed by the interviews that were held with Head of Finance (HOF) of Soroti College who when asked to comment about the influence of internal control environment on financial performance had this to say;

*“Ensuring a favorable internal control environment within the institution is very fundamental in ensuring an increase in financial performance. Ever since we put our focus on creating awareness amongst all our employees on the importance of working in an environment where everyone is informed of internal control procedures and policies, there has been a gradual increase in financial performance in Soroti College. This is because employees have gained personal accountability which has reduced misuse of resources hence reducing operational costs.” (HOF)*

#### **4.5.3 The effect of internal control activities on financial performance of UCCs**

The first objective of the study sought to establish the effect of internal control activities on financial performance of UCCs. The hypothesis that was adopted for testing stated that there is no significant influence of internal control activities on financial performance of UCCS.

Therefore, in order to address this, the study conducted linear regression analysis as observed in Table below.

**Table 4. 9: Regression results on the effect of internal control activities on financial performance.**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.639 <sup>a</sup>	.409	.403	.77063

a. Predictors: (Constant), Internal control activities

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.069	1	41.069	69.155	.000 <sup>b</sup>
	Residual	59.388	100	.594		
	Total	100.457	101			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Internal control activities

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.096	.306		3.585	.001
	Internal control activities	.705	.085	.639	8.316	.000

a. Dependent Variable: Financial performance

**Source: Primary data**

From the results in Table 4.9 above, the ANOVA shows F-value of 69.155 and P-value of 0.000 which is less than 0.05 implying that the model was a good fit and statistically significant hence, internal control activities have a significant influence on financial performance of UCCs.

Furthermore, the regression model summary shows an adjusted R squared is 0.403 which is approximately 40.3%. This implies that 40.3% of the variations in financial performance is explained by internal control activities whereas 59.7% of the variations are explained by other factors that were not included in this study.

From the coefficients, the findings of the study revealed that an increase in internal control activities by one unit, would result into an improvement in financial performance by 0.705 (Beta =0.705). This therefore, presents the regression model;  $FP = 1.096 + 0.705 ICA$  where; FP = Financial performance and ICA = Internal control activities

As a result, the study rejected the null hypothesis that stated that there is no significant influence of internal control activities on financial performance in support of the alternative hypothesis that states that internal control activities have a significant influence on financial Performance.

The above finding was confirmed by the interviews that were held with Head of Finance (HOF) of Soroti College who when asked to comment about the influence of internal control activities on financial performance had this to say;

*“At Soroti College we ensure that control activities are implemented. For instance, we ensure separation of duties, we have physical controls such as security guards, agate and wall fence. These physical controls have supported us to prevent theft and other forms of linkages that are costly to the institutions. It has therefore helped us to minimize costs of replacements which in return has improved on our financial performance.” (HOF)*

#### **4.5.4 Multiple Regression analysis on the study objectives**

The multiple linear regression was conducted to provide answers to the general objective of the study that sought to establish the influence of internal control systems on financial performance.

The findings are presented in table 4.10.



**Table 4. 10: Results of the multiple regression coefficients****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.674 <sup>a</sup>	.454	.437	.74828

a. Predictors: (Constant), Internal control activities, Information and communication, Internal control environment

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.585	3	15.195	27.137	.000 <sup>b</sup>
	Residual	54.873	98	.560		
	Total	100.457	101			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Internal control activities, Information and communication, Internal control environment

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.534	.357		1.496	.138
	Information and communication	.323	.131	.256	2.460	.016
	Internal control environment	.076	.119	.069	.639	.524
	Internal control activities	.466	.125	.423	3.728	.000

a. Dependent Variable: Financial performance

*Source: Primary data 2020*

Table 4.10 above shows the ANOVA with F-value of 27.137 and P-value of 0.000 which is less than 0.05. These results indicated that the model is statistically significant hence, internal control systems collectively have a significant influence on financial performance of UCCs.

The regression model summary results indicate adjusted R squared of 0.437 which implies that 43.7% of the variations in financial performance is explained by information system, internal control environment and internal control activities. Whereas 56.3% of the variations are explained by other factors that were not included in this study.

From the coefficients the study developed the regression model from the unstandardized coefficients as follows:  $FP = 0.534 + 0.323IC + 0.076ICE + 0.466ICA$  where; FP is Financial performance, IC is information and communication, ICE is internal control environment and ICA is internal control activities. It is therefore observed internal control systems collectively predict financial performance however, internal control activities is the highest contributor to the financial performance (Beta =0.466).

## **CHAPTER FIVE**

### **SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents a summary of key findings, discussion of findings of the study in relation to the objectives with a view of reaching a conclusion. The summary of key findings, regarding the influence of information and communication, internal control environment and internal control activities are presented in the first two sections. This is followed by the conclusions and recommendations presented in the last two sections.

#### **5.2 Summary of key findings**

The main purpose of the study was to examine the influence of internal control systems on financial performance of Uganda Colleges of Commerce. It specifically focused on addressing three objectives that sought to establish the influence of information and communication, internal control environment and internal control activities on the financial performance of Uganda Colleges of Commerce. The data for the study was collected from 102 staff of Tororo, Aduku and Soroti.

First, the descriptive study findings revealed that majority of the respondents agreed that information and communication is a key determinant of financial performance, the descriptive statistics of the means for these predictor variables were all above the average of 3 on a scale of 1 to 5 implying that respondents agreed that these items were highly important in explaining these variables.

Secondly, in order to address the study objectives and to test the hypothesis, the study conducted a linear regression so to determine the amount of variance in financial performance that is explained by information and communication system, internal control environment and internal control activities. The findings therefore revealed that Information and communication has a

significant influence on Financial Performance. The study finding also revealed that internal control environment has a significant influence on financial performance. Lastly, it was also established that internal control activities have a significant influence on financial performance

### **5.3 Discussion of the Study Findings**

#### **5.3.1 Information and communication system and financial performance in UCCs.**

The study findings showed that Information and communication system has a significant influence on financial performance. It was established that institutions such as Uganda College of Commerce that improve on their information and communication systems are likely to register an increase in financial performance. This finding gives a supporting evidence to the general perspective that has it that when an organization has clear channels of communication and sharing of information especially between top management and employees, there would be an increase in the financial performance.

The study findings were in line with Chen (2004) who puts it clear that for the control system to be effective and efficient, there should be relevant and reliable information which should be recorded and communicated to management and other personnel within the organization. Effective information generates reports enclosing operational, compliance and financial information that enable to run and manage a business (Mwachiro, 2013). The study findings are in agreement with Gaskill (2000) who asserts that, information and communication element of internal control allows timely accomplishment of reporting via gathering and communicating significant information within stipulated time. Chen (2010) showed that Information and communication systems give reports containing operational, financial and compliance related information that make it possible to run and control an organization.

Furthermore, Millichamp (2013) affirm that effective communication should occur in a broad sense with information flowing down, across, and up within all the sections of the organization whereby employees should be in position to understand what has been communicated The

information system, including the accounting enables the organization to make appropriate decisions in managing and controlling the activities (Ofori, 2011). Batra et al (2011) said that control of documents involves control of company's sensitive documents for example receipts, cheques, local purchase orders, debit and credit notes. These documents must be handled by a responsible officer and should be pre numbered to ensure control and minimize misuse.

### **5.3.2 Internal control Environment and Financial Performance in UCCs**

The study findings showed that Internal Control Environment has a significant influence on financial performance. It was further established that institutions that improve on the internal control environment are likely to register an increase in financial performance. The study finding is supported by management reports that emphasize the need for organizations to improve the internal control environment if there is a need to reduce on the financial risks associated with its absence. The emphasis always for institutions to ensure awareness amongst the employees about the environment they are working in and what is expected of them especially when dealing with institution's finances.

The study findings were in line with Shafawaty (2013) who focused at control environment as the art of regulating actions and behaviours of internal and external stakeholders in order to achieve positive outcomes in terms of effect from internal controls of the organisation. Hevesi (2005), considered the control environment to be the attitude toward internal control and control consciousness established and maintained by the management and employee of an organization. Organization structure including organization structure settings, responsibilities allocation, what position of the person in the organization is and what power and responsibility he has. COSO (2013) put it down that Control environment consists of the governance and management functions as well as the attitudes, awareness and actions of those charged with governance and management towards internal controls and its importance to the organisation.

### **5.3.3 Internal control activities and financial performance in UCCs**

The study findings showed that Internal control activities have a significant influence on financial performance. It was established that institutions that ensure internal control activities such as physical controls will have a likely improvement in financial performance. The study findings were in agreement with other scholars like Whittington and Kurt (2001) assert that control activities are vital in ensuring that the internal control systems continue to operate as intended they are on-going actions that organizational members take to ensure proper execution of operations and are particularly designed to support accurate, complete and reliable financial transaction processing. Woolf (2011) indicated that all transactions must be authorized and approved by the right and responsible officer. This is aimed at preventing frauds, safeguarding the company assets, streamlining the flow of authority to avoid bureaucracy and conflicting authorized activities for example purchases invoices should be approved before payment is made to suppliers, and wages payment be approved before cash withdrawal from the bank. Muraleetharan (2013) also defined Control activities are defined as the set of regulatory and policy frameworks that serve to direct actions and behaviours of stakeholders-employees towards the achievement of the set objectives of the organisation.

## **5.4 Conclusion of the Study**

### **5.4 .1 Information and communication and Financial Performance in UCCs.**

The study concluded that information and communication have significant influence on financial performance in the UCCs and the majority of the respondents strongly agreed that when there are well developed information and communication in place in terms of information protection, recording of transactions and quality information support, there will be improved level of financial performance. However, there were still elements of poor information flow like failure to provide feedback to staff on time about their performance, payments without accounts department verifying and failure to record of some transactions. Such information and

communication gaps need to be addressed so as to ensure improved financial Performance in the UCCs.

#### **5.4.2 Internal Control Environment and Financial Performance in UCCs.**

The study concluded that Internal Control Environment has significant influence on financial performance in the UCCs and the majority of the respondents strongly agreed that when there is a favorable environment in terms of clear policies and procedures, clear job description, organisational structure staff commitment to competence and ethical values and integrity in place there will be improved level of financial performance. However, there were still elements of absence of clear staff structure, late staff appraisals and complacency of the ethical values. Such internal control environment gaps need to be addressed so as to ensure improved financial Performance in the UCCs.

#### **5.4.3 Internal Control Activities and Financial Performance in UCCs.**

The study concluded that Internal Control Activities has significant effect on financial performance in the UCCs and the majority of the respondents strongly agreed that when there is authorization of activities, segregation of duties and security of assets there will be improved level of financial performance. However, there were still elements of delay in authorization of execution of activities, segregation of duties and proper safety of institutions' assets such internal control activities gaps need to be addressed so as to ensure improved financial Performance in the UCCs.

### **5.5 Recommendations of the study**

The recommendations were drawn from the findings of the analysis according to the objectives of the study.

### **5.5.1 Information and communication and Financial Performance in UCCs.**

The UCCs should put in place information and communication system that allows free and effective transmission of information among the staff. The institutions should also draw strategies on how confidential information would be kept without leaking. They should also ensure electronic information is kept safely to avoid distortion by opportunistic staff.

Staff from the accounting section should be introduced to a system that allows instant recording and communication of the transactions as they occur for accountability purposes.

The study also recommends that the institutions establishes information management system within the institutions so as to enable staff within the institutions to freely access and utilize the official information.

### **5.5.2 Internal Control Environment and Financial Performance in UCCs.**

The UCCs need to create a favorable internal control environment for efficient execution of their duties to minimize fraud; efficient and effectiveness of performance including management integrity and ethics are emphasized and strongly adhered to as they determine the strength of control environment and improved financial performance in institutions.

Suitable means should be used to correct mistakes that have been made while conducting their roles by providing strategies for improvement. Feedback should be provided to subordinates their performance as this helps to improve performance.

### **5.5.3 Internal Control Activities and Financial Performance in UCCs.**

The management of UCCs should ensure that there exists effective and strong internal control activities such as ensuring good financial policies, hiring the right employees and enable segregation of duties.



A labelling system should be introduced in the UCCs to ensure that all assets procured are immediately labelled to avoid staff personalizing them and should be kept safely for all institutional use.

### **5.6 Areas of Future Research**

This research was undertaken in only three UCCs in Uganda, the results can't give a general conclusion to all the institutions of higher learning, therefore research should be undertaken to examine how internal control systems influence financial performance in the public universities in Uganda. Research can be done to examine the other two components of risk assessment and monitoring activities on the financial performance of UCCs and public Universities.

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**APPENDIX I: QUESTIONNAIRE TO EMPLOYEES OF UGANDA COLLEGES OF  
COMMERCE, TORORO, SOROTI AND ADUKU.**

Dear Sir /Madam

Introduction.

Thank you for agreeing to participate in this study. I am a Postgraduate student at Kyambogo University Pursing a program leading to the award of Masters of Business Administration. I am carrying out research on the topic: ***INTERNAL CONTROL SYSTEMS AND FINANCIAL PERFORMANCE OF INSTITUTIONS OF HIGHERLEARNING: A CASE OF UGANDA COLLEGES OF COMMERCE***'. Please be assured that all the information collected will be kept confidential and that your identifiable indicators will never be shown to any other party or for any other purpose other than for its academic purpose.

**PART A: BIO INFORMATION**

1. Gender of respondent Male  Female

2. Highest level of education: What is your highest level of education?

Diploma

Higher National Diploma

Other College Education

Degree

Postgraduate

PHD

3. Period of service: How long have you worked at UCC?

Less than 1 year

6-10 years

1-5 years

Over 10 years

4. Department of Service .....

**PART B: INFORMATION AND COMMUNICATION**

5. What is your level of agreement with the following statements that relate to issues of information and communication and their influence on the financial performance at UCC? Use a scale of 1-5 (1- Strongly Disagree; 2-Disagree; 3-Neutral; 4- Agree; 5- Strongly Agree)

	1	2	3	4	5
The imprest system is in place and reconciled often					
All procurements received are counted and inspected before being recorded					
At the receipt of every procurement, receiving documents are matched with purchase orders and invoices before payments are made					
Accounting records are maintained on a periodic basis					
Documents are verified by the bursar of the institution					
All accounting records are properly retained for accountability					
The institution has well established information channels					

There are suggestion boxes in place to obtain information from the institution staff					
The institution uses whistle blowing mechanism to obtain complex and uncertain information that may affect the institution from achieving the set goals					
There is free flow exchange of information					
Management provide feedback to the staff about their performance					
Information is accessed with the consent of senior management approval					
UCC has put in place procedures to gather, process and report authentic information within appropriate time to ensure staff perform their duties.					
Information flow generates reports that enable to run the institution					
Information and communication enables the institution to make informed decisions					
Institution's documents are handled by only authorized personnel					

**PART C. INTERNAL CONTROL ENVIRONMENT**

6. What is your level of agreement with the following statements that relate to the effect of internal control environment on the financial performance at UCC? Use a scale of 1-5 (1- Strongly Disagree; 2-Disagree; 3-Neutral; 4- Agree; 5- Strongly Agree)

	1	2	3	4	5
The management of the institution has the responsibility for approving and periodically reviewing the institutional policies.					
The management of the institution is ultimately responsible for ensuring that an adequate and effective system of internal controls is established and maintained					
Top management provides governance, guidance and oversight to teaching and non-teaching staff					
The institution has an institutional structure that clearly defines lines of authority and responsibility					
Staff job descriptions, including specific duties, reporting responsibilities, and constraints are clearly established and effectively communicated to staff					
Policies, procedures are well defined					
The institution reward staff in order to attract qualified individuals.					
Staff appraisals are implemented to identify incompetent staff that require training					
Ethical values are upheld in all management decisions					
Codes of conduct exist in the institution					
The institution has a clear staff structure for recruitment and competency development of staff					
Our staff are reliable and responsible					
Staff members are granted leave days to check their efficiency and reduce errors					
Routine and automatic checks are in place in finance					

**PART D. INTERNAL CONTROL ACTIVITIES**

7. What is your level of agreement with the following statements that relate to the internal control activities on the financial performance at UCC? Use a scale of 1-5 (1- Strongly Disagree; 2- Disagree; 3-Neutral; 4- Agree; 5- Strongly Agree)

	1	2	3	4	5
The institution has clear separation of roles assigned to individual staff					
There is supervision by senior staff on the work of subordinate staff					
Approval and authorization are properly documented and referred to					
Those in authority are aware of their power to approve and authorize transactions					
Unauthorized transactions are not processed					
Disciplinary action taken for breach of approval and authorization systems in place					
Internal Control system safeguards assets against unauthorized acquisition.					
Security system identifies and safeguard institutional assets					
The assets are secured and belong fully to the institution					
Physical valuations of assets are done on a continuous basis					
Access of institutional assets is limited to authorised personnel					
The institution has put in place alarm and camera system as a control against theft					
Complaints against staff members are handled in a professional way by management					

**PART E. FINANCIAL PERFORMANCE**

8. What is your level of agreement with the following statements relates to financial performance at UCC? Use a scale of 1-5 (1- Strongly Disagree; 2-Disagree; 3-Neutral; 4- Agree; 5- Strongly Agree)

Financial Accountability	1	2	3	4	5
Internal control system leads to improved accountability in the institution.					
Proper internal control activities enable to account for the expenditure conducted					
Internal control system in place enables effective audit to be undertaken					
Liquidity					
Proper financial management of the institution enables proper running of the institution					
Internal control system enables the institution to collect revenue from students					
Timely financial reporting					
There is timely submission of reports					
Timely reporting enables proper planning of the institution					
Internal controls enable budgeting of the institution					
Funds utilization					
The internal control system leads to proper management of funds					
Internal control system allows achieving of the intended goal as the funds accurately utilized					

**Thanks for participating**

## **APPENDIX II: INTERVIEW GUIDE**

My name is **Okol Eric** and I am a student of Master's degree of Business Administration at Kyambogo University. I am conducting a study on Internal Control Systems and Financial Performance as the partial requirement for the Master's degree award. You have been selected as a respondent to provide me with your views on this study based on your experience on the subject matter. Your views will be kept and treated confidentially and at no moment will it be used against you.

### **Questions**

1. Are there control measures in this institution? If yes, what are they?
2. How are these control measures implemented in this institution?
3. Comment on the information and communication available in this institution?
4. What type of control activities do you have in place?
5. Discuss the environment in which this institution operates?
6. How do the control measures influence the financial performance of this institution?
7. How would you define financial performance and how is it measured in this institution?

**END.**

**APPENDIX III: TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN  
POPULATION**

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: "N" is population size

"S" is sample size

*Krejcie, Robert V., Morgan, Daryle W. (1970). "Determining Sample Size for Research Activities", Educational and Psychological Measurement.*