UNIVERSITY OF CAPE COAST

EFFECT OF INTERNAL CONTROLS ON THE PERFORMANCE OF CO-OPERATIVE CREDIT UNIONS IN THE BRONG AHAFO REGION OF GHANA

HENRY DEMESINGEE ANGTUONGBA

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BY

HENRY DEMESINGEE ANGTUONGBA

Dissertation submitted to the Department of Business Studies, College of Distance Education, University of Cape Coast, in partial fulfilment of the requirements for the award of Master of Business Administration degree in Accounting

MAY 2019

DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: ……………………… Date: …………………….

Name: Henry Demesingee Angtuongba

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature: ………………………… Date: …………………

Name: Ms. Peace Yawo Ametepi

ABSTRACT

The purpose of the study was to examine the effects of internal control on the performance of co-operative credit unions in the Brong Ahafo Region of Ghana. Descriptive survey design was adopted for the study. The Yamane`s sampling technique was used to select the 167 respondents who were key employees of the CUs. Questionnaire was used to collect the data. The data were analysed using both descriptive and inferential statistics. The study revealed that internal control has significant positive effect on the performance of the co-operative credit unions in the Brong Ahafo region of Ghana. Also, it reveals that the major challenge or limitation to internal control is poor response to anomalies reported. Also, proper implementation of controls was found to be a challenge in the sampled CUs. However, greater proportion of the selected co-operative credit unions has good internal control systems in place and personnel or workers have the necessary skills and attitude to maintain the systems of internal control. Clearly, internal control practices have been found to be available at all levels of the organisational management hierarchy. The study recommends that the management of credit unions should effective and efficient implement internal control systems that matches their business` needs and invest in them appropriately to enhance the performance of the CUs. Also, the co-operative credit unions should embrace and invest significantly in risk assessment and management to maximize the benefits of internal control systems. This current study would serve as a wake-up call for all stakeholders with respect to ensuring the effective use of internal control systems in their organisations.

KEY WORDS

Internal Control

Performance

Co-operative Credit Unions

Brong Ahafo Region

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However, I am entirely responsible for any errors and omissions that may be found in this dissertation. Finally, I wish to thank all those who helped in diverse ways to make the writing of this dissertation a reality.

DEDICATION

To my wife, Mary Assunta Danyi and my son Angtuongba B. Jason.

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LIST OF ACRONYMS

CUs	Credit Unions
CUA	Co-operative Credit Unions Association
LR	Logistic Regression
IC	Internal Control
Chi^2	Chi-Squared
RoI	Return on Investment
RoA	Return on Asset
RoE	Return on Equity
CAR	Current Asset Ratio
COSO	Committee of Sponsoring Organisations
WOCCU	World Council of Credit Unions
UCC	University of Cape Coast

CHAPTER ONE

INTRODUCTION

Internal control is a vital part of management process by which entities manage their activities and operations so as to accomplish their missions and objectives in an effective and efficient manner (International Federation of Accountants, 2012). For this reason, any organisation of whichever form or size must put in place its own system of controls to achieve desired objectives. Internal controls have the potential of providing a reasonable assurance and not an absolute assurance with regard to achieving the entities` set goals and objectives. Implementation of a proper system of internal control will enable an entity to operate in more effective and efficient manner (Sulaiman, Siraj & Mohamed, 2008). It is difficult for entities to know if they have complete and accurate information if they lack proper internal controls (Long, 2009).

Dumitrascu and Savulescu, (2012) opined that the risks that may be caused by improper records of accounting transactions and making unauthorized transactions may significantly affect the entity's performance more especially in financial perspective. The adoption of a strong and effective internal control system in an entity is crucial for a safe and sound management of an entity. This research assesses the effect of internal control on performance of co-operative credit unions in the Brong Ahafo region.

Background of Study

In fact, the concept of internal control has been in existence since times memorial. Notably, Gupta (1991) cited that its origin can be documented and traced back to civilized communities that existed around 5000 B.C. The governments of these empires imposed a number of taxes on individuals and business for proper accounting and collection of taxes and an elaborate system of checks and counterchecks. Such systems of internal control in early times were designed basically to protect state properties and minimize errors done by dishonest tax collectors (Gupta, 1991). According to Gupta (1991), the Mesopotamian civilizations which existed about 3000 B.C. used comprehensive systems of internal controls and their transaction summaries were prepared by scribes but these scribes did not provide valid records of receipts and payments.

Literature indeed has a very tall accounts of the development of the concept of internal control, its application and effectiveness. However, Internal control is only effective if the following components are well incorporated; control environment, assessment of risk, monitoring, communication and information and control activities (Sampson, 1999). However, the overall success and performance of a system of internal control depends on how well each component of internal control are functioning as well as how they are coordinated with each other (Oseifuah & Gyekye, 2013).

Control environment is linked to the factors which have the potential of determining the effectiveness levels of policies, procedures, and methods which are specific to the process. By the same token, the control environment also refers to a value, which a firm's management attaches to importance of audit and management of risk functions (Boame, Solace & Issaka, 2014). The control environment is always seen as the main aspect of the entity management since it reflects the attitude and management policies regarding the importance of internal audit in economic units (Theofanis, Drogalas & Giovanis, 2011).

Assessment of risk refers to the identification of relevant risks and the analysis of such risks to achieve the objective of forming a better basis on how to well manage such risks. According to Ndamenenu, (2011), assessment of risk is a process of integrating a professional judgment about the potential of adverse events or conditions, and assessment of the likelihood of a possible loss to the entity. The major goal of carrying out an assessment of risk is to determine any situation which may pose a legal or financial risk to a firm (Boame, Solace & Issaka, 2014). In such cases, the firm's management must be able to determine an acceptable level of risk carefully, and try to maintain the risk within determined levels (Badara & Saidin, 2013).

Control activities comprises the policies and procedures which ensure that the management directives are carried out to the latter. They ensure that necessary actions for addressing risks are taken so as to achieve the entity's set goals and objectives (Mwakimasinde, Odhiambo & Byaruhanga, 2014). Components of control activities describe every policy, procedure and the best practice a firm especially small ones can put in place so as to minimize risk (Boame, Solace & Issaka, 2014). Example of control activities may consist of; segregation of duties, daily bank reconciliations and so on (Badara & Saidin, 2013).

Communication and Information are systems or processes which support identification, capture, and information exchange in a form and period which enables people in carrying out their responsibilities (Ndamenenu, 2011). Information is usually seen as a vehicle in which control procedures, policies are presented, and reinforced. On the other hand, communication is a mean by which employees are made aware of management's commitment to internal controls (Oseifuah & Gyekye, 2013). Information must be conveyed throughout entire entity so as to permit personnel to effectively and efficiently carry out their responsibilities with an aim of achieving the entity's set goals and objectives (Badara & Saidin, 2013).

Monitoring deals with assessment of performance of internal control over period of time. It is usually done by ongoing monitoring activities and by evaluations of internal controls like self-assessments (Ndamenenu, 2011). Monitoring aim at determination of whether internals control within an entity are adequate, properly executed, and effective (Sampson, 1999).

To ensure the effective and efficient management of credit delivery and recovery of all facilities granted at expiry, internal controls are normally put in place. In the financial sector, to enhance the efficiency and effectiveness of internal control in organisations, various legislations have been designed by Central Bank of Ghana and the Government of Ghana which includes but not limited to the 1992 Constitution of the Fourth Republic, the Financial Administration Act (Act 654), the Criminal Code of 1960 (Act 29), Internal audit Agency Act (Act 658) and the Public Procurement Act (Act 663). Nonetheless, internal control only provides reasonable assurance, not absolute assurance for organisations. This is because it is humanly operated therefore human error, management override, breakdowns, deliberate circumvention, improper collusion among people who are supposed to act independently can cause failures of the internal control to achieve objectives.

As part of improving their internal control systems, internal auditing function, and financial performance, most credit unions in the country have put in place mechanisms to ensure internal control and compliance in credit delivery. These include setting up an internal audit unit, a monitoring unit and issuing the Accounting, Treasury and Financial Reporting Rules (ATE Rules).

It is therefore in this light that this dissertation is undertaken to assess the effect of internal control system and how it affects the financial performances of credit unions. The growth and development of the financial institutions are dependent on the effective and efficient management of its credits. Under the Committee of Sponsoring Organisations` (COSO) framework, objective setting is seen as a precondition for internal control. By setting objectives, management is able to identify potential risks to the achievement of set objectives. To address these risks, management of organizations may implement specific internal controls. The effectiveness of internal control can then be measured by how effectively the risks are addressed and how well the objectives are achieved.

More generally, budgets, plans, setting objectives, and other expectations establish criteria for control. Control itself exists to keep a state of affairs within what is allowed and expected. Control built within a process is internal in nature. It involves having combination components that are interrelated and these include necessary information, social environment effecting behaviour of employees, as well as policies and procedures. Internal controls as a structure is a plan which predicts how internal control is made up of these interrelated components.

Corporate governance as a concept heavily relies on the necessity of internal controls because internal controls ensure operation of processes as designed and risk management carried out. Further, it is necessary to establish strategies that ensure that aforementioned procedures will be performed as intended: integrity and competence, right attitudes, and monitoring by managers.

Despite the installation and maintenance of internal control systems being expensive, it gradually evolved over the years with the greatest development occurring at the beginning of 1940's. Not only have the complexities of the business techniques contributed to this development but also the increased size of business units which have encouraged the adoption of methods which while increasing efficiency of business, acts as a safeguard against errors and frauds.

Mawanda (2008) posits that, generally people perceive that instituting and enforcement of proper internal control systems will always lead to improved financial performance. Another general belief is that effectively established system of internal controls improves reporting process and gives rise to reliable reports enhancing accountability function of management of organisations. Preparing reliable financial information is thus a key responsibility of the management. The ability to effectively manage the firm's business requires access to timely and accurate information.

Credit Unions are important contributors to the economy of Ghana. Apart from creating employment opportunities, they have also led the establishment and growth of many micro enterprises, training of entrepreneurs, generation of income as well as sources of livelihood for the majority of low-and-middle income earners/households by financing their businesses or ventures. Credit Unions traditionally have become the main source of funding for micro enterprises in Africa and in other developing regions of which Ghana is not exception (Anthony, 2004). CUs were initially established as institution-based organizations or aimed towards people on incomes. However, in recent times CUs have opened up to a wider variety of clients in the community where they are based (Darko, 2007).

The Ghanaian credit union industry has evolved from a highly regulated sector into a largely market driven one. The regulatory and institutional framework has improved considerably yet still credit unions in Ghana are facing some challenges as the world deals with one of the deepest financial crises in the history of the planet (Beacon, 2010). The recent demise of Ghana Co-operative Credit Unions Ltd is test case of how gaps in internal controls can easily cause collapse of financial institutions. Internal controls and risk managements has a purpose to ensure the efficiency and effectiveness of operational activities, reliability of financial information, compliance with applicable rules and regulations and sustainable business growth have been incorporated into the mundane activities of credit unions in Ghana. Most credit unions go through difficulties in recovering facilities given to customers after expiry. Issues of default of credit facilities by credit unions are gradually destroying most gains and weakening business opportunities.

Internal controls and risk managements and sustainable business growth have been incorporated into the mundane activities of credit unions in Ghana. The Ghana Cooperative Credit Union Association (CUA), which is the governing body of all credit unions in Ghana regulates the interest rates that Credit Unions have to pay on members' savings and charge on loans, perhaps reflecting the initial welfare nature of credit unions. Credit Unions operate a Central Finance Facility into which member CUs contribute and source funds to lend to their members (Darko, 2007). The Bank of Ghana, which plays the regulatory role of financial institutions in the nation has instituted some measures to make sure financial institutions function to improve on the effectiveness of their internal control systems and financial performance. These various legislations have been passed to reduce fraud, the risk of misstatements, and mismanagement of both government and corporate resources.

As observed by the Accredited Certified Chartered Accountants, (ACCA), the Office of accountability at the Presidency was created among the Commission on Human Rights and Administrative Justice (CHRAJ) and the Serious Fraud Office. With support from the UNDP in 2005, the Securities and Exchange Commission (SEC) was also created to carried out a country assessment of corporate governance standards in Ghana, which led to issuing of new corporate governance standards in the same year (ACCA, 2005).

However, as opined by Kamau, (2016), entities are always vulnerable to many risks if they lack adequate internal controls. The risks that may be caused by improper records of accounting transactions and making unauthorized transactions may significantly affect the entity's performance more especially in financial perspective (Dumitrascu & Savulescu,2012). An entity can benefit more if it has an effective internal control. With a proper internal control system, an entity can be in a position to comply with laws and regulations in a smooth way as compared to an entity that doesn't have a proper system of internal control (Shanmugam, Haat & Ali, 2012). It is against this background that this study evaluates the effects of internal control on the performance of co-operative credit unions in the Brong Ahafo reiong of Ghana.

Statement of the Problem

Co-operative credit unions play very vital role in the economy of any nation particularly in developing nations such as Ghana (Chakraborty, 2015).

Globally, majority of CUs are really struggling to survive. Those that are able to survive are still performing so badly despite their crucial contributions to the entire economy (Neneh & Zyl, 2012). As such, an effective internal control has the potential of enabling them to succeed and reducing employee fraud (European Federation of Accountants, 2014). According to Jensen, (2003), Internal control systems are primarily established to enhance the reliability of financial performance directly or indirectly by increasing accountability among information providers in an organisation. Internal controls provide an independent assessment of the quality of managerial performance an organisation possesses in carrying out assigned responsibilities for better revenue generation or attainment of its set goals and objectives.

Generally, many CUs in Ghana are faced with poor performance despite having the necessary resources to run them. It is not very surprising to see credit unions lacking the ability to increase their customer base, generate more revenue and pay customers their saved monies as and when the need arises. This has led to many credit unions not growing with respect to time and technology as well as financial strength to attract new customers, hence, adding to the financial burden they are already experiencing (Ebowessuman, 2016).

The general poor performance and the inability of the CUs across the globe to significantly grow and execute their functions for which they are in existence have really triggered calls for a systematic approach to analyse the internal control system within credit unions and how it has affected their financial performance over the years. The internal control system of credit unions needs to be assessed and its effect on performance measured through the control environment, the risk assessment process, information systems and control activities within credit unions as indicated in the available literature.

Several studies have also been undertaken on the effect of internal control on performance. For example, a study by Oseifuah and Gyekye (2013) investigated internal controls effectiveness in South African small and medium-sized enterprises (SMEs) and revealed internal control practices among SMEs in South Africa was very low, with only a few of them having adequate internal controls systems in place. Dineshkumar and Kogulacumar (2013) also studied an extent to which systems of internal control influence a firm's performance and revealed a strong relation between systems of internal control and firm's performance of Sri Lanka Telecom limited. However, these two studies did not focus on effect on internal control on CUs` performance.

In Kenya, Kamau (2014) examined effect of systems of internal control on performance in financial perspective of manufacturing firms and established a positive relation between internal control and performance in financial perspective, however; the study was based on large manufacturing firms hence its findings may not be generalized to the CUs` context.

Narrowing it down to Ghana, Ebowessuman, (2016) examined the effects of internal control on the financial performance of credit unions within the Sekondi-Takoradi Metropolis and found out that, credit unions in Sekondi-Takoradi Metropolis have structured control environment which included the presence of policies that guided work process and roles and responsibilities that highlights each employee's role and responsibility. However, his study has deviations in measuring the financial performance against the internal control systems or structures available to establish the main purpose of his study. Again, firm performance goes beyond financial performance, hence the measuring the effects of internal control against financial performance would not reveal the full story of the full magnitude.

That notwithstanding, most of the reviewed empirical studies indicate that internal controls are vital to any business organization. However, despite the fact that internal controls are vital factor affecting firms regardless of their sizes and industry, there is little evidence on the effect of internal control practices on performance of co-operative credit unions since most of the studies on internal controls globally and in Ghana focus more on financial performance and large firms to the neglect of co-operative credit unions. It is for this reason that this study assesses the effect of internal controls on the performance of co-operative credit unions within the Brong-Ahafo Region of Ghana.

Purpose of the Study

The general purpose of this study was to evaluate the effect of internal control system on the performance of Co-Operative Credit Unions in the Brong Ahafo Region of Ghana.

Research Objectives

To help achieve the main purpose of this study and to keep the study focused, the following specific objectives were set to guide the study;

- to assess the effectiveness of the control activities used by the co-operative credit unions.
- To ascertain the effects of the internal controls on the performance of the selected co-operative credit unions.
- To identify the challenges encountered in practicing internal controls amongst the selected co-operative credit unions.

Research Questions

From the objectives of the study, the following research questions were set to help achieve the objectives of the study;

1. How effective are the control activities used by the selected co-operative credit unions?
2. What are the effects of the internal controls on the performance of the selected co-operative credit unions?
3. What are the challenges encountered in practicing internal controls amongst the selected co-operative credit unions?

Significance of the Study

The importance of internal controls in any institution especially a financial institution cannot be over emphasized. The study has brought to light the effectiveness and the efficiency level of the internal controls practiced by co-operative credit unions. The study also made known the effect these internal controls have on the performance therefore pointing out the flaws and strength of the internal controls practiced by co-operative credit unions. It also made known the challenges co-operative credit unions encounter in practicing these internal controls which would all together enrich already existing knowledge.

This would inform management and staff of other institutions on the flaws and strengths of some internal controls to help them make better policies that would help curb fraud. This will help increase public confidence in the sector as they would be sure their money is in safe hands and no fraudster would be able to lay hands on it. It also ensures that institutions do not lose any amount of money illegally or legally due to fraud and other illegitimate transactions.

Scope of the Study

The study is limited to only co-operative credit unions in the Brong-Ahafo Region of Ghana; it is from these co-operative credit unions that respondents were selected for questionnaire administration to enable the study get the needed data to answer the research questions and achieve the objectives of the study. The study considered only the staff of the co-operative credit unions as they would have the insight on the internal control measures put in place.

Limitations of the Study

The study faced some limitations as it is dealing with a very sensitive part of the operations of co-operative credit unions that is their internal controls. The co-operative credit unions were reluctant in giving out the needed information as they thought it would expose the way they operate.

The bureaucratic process involved in getting the co-operative credit unions to grant permission to use them for the study was a challenge. A lot of explanations had to be made to get them to understand the essence of the study and also a pledge had to be made not to disclose any information they give unless it was for this academic purpose.

Again, the study was demanding in terms of resources; that was time and money as extensive work had to be done amongst the co-operative credit unions in the Brong-Ahafo Region which is large in size.

Definition of Terms

Credit Unions

Darko (2007) defines credit union as a group of individuals with the common interest coming in agreement to save together in order to create a financial pool out of which they can give credit among themselves in times of need for productive or provident purposes. Similarly, a credit union can further be defined as a financial co-operative owned by members united in a shared interest who put their savings into a common pool so that the funds are lent at reasonable rates of interest out of the pool to members for worthy purposes and could provide other services that are financial in nature.

In the view of the CUA Beacon (2010), it is a non-banking financial co-operative established by people of common interest or bond through either occupation, profession, clubs and associations, members of a community, among others, who pool their savings and other resources together in order to obtain a loan at fair and reasonable rates of interest for worthy, productive and provident purposes. The co-operative credit union as used in this study is in line with the views of CUA Beacon (2010).

Internal Control

According to Verschoor (1999), internal control is the term generally used to describe how management assures that an organization does meet its financial and other objectives. Internal control systems not only contribute to managerial effectiveness but also important duties of corporate boards of directors. Gupta (2001) drawing from Statements of Standard Auditing Practices No. 6 (SAP 6) defines Internal control as “the plan of organization and all the methods and procedures adopted by the management of an entity to assist in achieving management objectives of ensuring as far as practicable, the orderly and efficient conduct of its business, including adherence to management policies, the safeguarding of assets, prevention and detection of fraud and error, the accuracy and completeness of accounting records and the timely preparation of reliable financial information". Internal control as used in this study is in line with the views of Gupta (2001).

Organization of the Study

The study is structured into five chapters as follows: Chapter one is concerned with the background of the study, statement of the problem, purpose of the study, research objectives, research question, and significance of the study, limitations of the study and organization of the study. Chapter two consists of the literature review, which gives an in-depth academic analysis of the problem correlation with theoretical, empirical review and conceptual framework that elaborate on the study, by depicting what other schools of thoughts have emerged with on the topic of study. Chapter three is focused on the methodology; how the research was conducted in the field and the gathering of data. It explains how the problem was investigated. Chapter Four presents the results of the study which will include interpretation and discussion of the findings. Chapter Five summarizes the study, draws conclusions and offers recommendations for further research.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The increasing number of business failures and some widely publicised frauds have encouraged firms to put more emphasis on their internal control systems, which are specific to their particular operating environment. Management of every entity is under increased pressure to enhance the effectiveness of internal control and to effectively communicate this to the board of directors and shareholders (Kuhn & Sutton, 2010).Groups like auditors, suppliers and customers are also interested in internal controls since they may affect long term confidence in reporting, accountability and in the corporate form of organization (Rittenberg & Schwieger, 2001). Many studies have attributed the survival, growth and development challenges facing CUs to lack of effective internal control systems and structures. This study evaluates the effects of internal control on the performance of co-operative credits unions in the Brong Ahafo region of Ghana.

This chapter presents a review of the related literature to the subject under study. This chapter looked at context of CUs, internal control, challenges of CUs in enforcing IC systems, agency theory, system theory, reasonable assurance concept and the contingency theory since the study is anchored on ownership-management relationships, systems and performance of firms entrusted into the care of managers.

Theoretical Review

This section explains the theories underpinning this study and model the issues or assumptions guiding the study. Basically, theoretical review explains the theories behind the study. Specifically, this section looks at agency theory, system theory, the theory of the firm and the contingency theory.

Agency Theory

The agency theory exists when the principal who cannot manage his business him/herself, delegates the authority to an agent to manage it for their mutual benefits (Jensen & Meckling, 1976). The problem with agency arises immediately when the desires and the goals of the principal and the agent conflict. It is very tough and difficult or rather expensive for a principal to always monitor the work of his/her agent to ensure that the agent works and makes decisions on the best interest of the principal. Thus, the agency theory is to help in solving the principal and agent issues with an aim of ensuring a better relationship between them (Arwinge, 2013).

This theory is based on the notion that the interests of shareholders and the managers are not aligned in a perfect away to enable them work for a common goal, which is achieving the organizational set goals and objectives. The agency theory plays a crucial role in financing decisions because of the problems that arise between the debt holders and the shareholders (Arwinge, 2013).

The agency cost theory arose from the seminal contributions of Jensen and Meckling (1976). Agency cost theory assumes that firm's financing structure can be used as a mechanism or vehicle by managers and investors to solve the free cash flow problems. Agency theory explains that corporate forms of organizations are illustrated by professional managers who have little ownership but are running business on behalf of shareholders (owners) who are extensively dispersed characterizes an archetypal principal-agent problem

(Arwinge, 2013). Agency costs arises from separation of ownership and control, whereby managers maximize their own benefits or employ the firm's resources for personal gains instead of maximizing value of firm or the shareholders` wealth (Mian, Haris and Muhammad, 2012).

Internal controls are among the mechanisms, which are normally used in addressing the agency problem, which affects the performance of business entities of which co-operative credit unions are no exception. Installation of controls is able to reduce business risks and uncertainty, which arise from information asymmetries between principals and agents (Arwinge, 2013). Agency theory affirms that systems of internal control together with other intervention mechanisms such as good financial reporting and audit can help in maintaining a cost-efficient contracting between managers and the firm owners (Düztas, 2008). The principal has to put in place some controls, which will effectively and efficiently address agency issues (Arwinge, 2013).

Managers or employees may carelessly initiate, originate and fund potentially unsuccessful projects if internal controls are not religiously adhered to. The many cases of non-performance, delinquencies and all forms of organisational inefficiencies are traceable to poor adherence and non-compliance to established internal controls. The deliberations above support the fact that misbehaviour on the part of management could be controlled with proper internal controls.

Contingency Theory

Contingency theory is usually applied in description of a relationship that exists between context and structure of effective internal control and organizational performance especially in financial reporting perspective

(Jokipii, 2010). This theory asserts that there exist no better way of design planning and system of controls as well as management systems which can handle all situations effectively and successfully (Bobkova, 2014).

Therefore, this theory suggests that there exists no one universal control system, which is applicable to all firms in all situations. The basic premise of contingency research is that, organizational context and structure must fit together for an organization to perform well (Jokipii, 2010). Hence, the planning, design and systems of control is dependent on various internal variables and external variables and which a better fit between both internal and external variables and management systems should result in an improved performance of an organization (Bobkova, 2014). In summary, the contingency theory explains that organizations' behaviour and functions are dependent on factors such as technology, culture and the external environment that the organizations operate in while the theory of the firm asserts that, a firm is operated so as to meet the relevant marginal conditions with respect to inputs and outputs, thereby maximizing profits, or more accurately, present value.

System Theory

The systems theory was developed by Kaufmann (1966) to explain the historical development of a vibrant process. According to Amagoh (2008), a system consists of other subsystems whose integration and interdependence move toward an equilibrium within a larger system.

The systems perspective holds that to fully comprehend function of entire system, the integration among different components or individual units have to be understood. The internal control system covers all relevant areas of an entity and help in creating a properly organized and controlled unit

(Cheruiyot, 2014). The theory offers powerful tools to analyse systems of internal control and to understand interactions since an effective system of internal controls is an integrated system with interrelated components, supporting principles and attributes (Ayagre, Ishmael & Nartey, 2014). So, this theory offers the explanation of how the various dimensions of internal control need to be integrated or function complementarily to achieve organisational objectives.

The Theory of the Firm

In simplified terms, the theory of the firm aims to answer these questions: Existence, Boundaries, Organization - Why are firms structured in such a specific way, for example as to hierarchy or decentralization? Heterogeneity of firm actions/performances – What drives different actions and performances of firms? And lastly, the Evidence - What tests are there for the respective theories of the firm? (Thomas, 2008). The theory of the firm consists of a number of economic theories that describe, explain, and predict the nature of the firm, company, or corporation, including its existence, behaviour, structure, and relationship to the market (Kantarelis, 2007).

This theory affirms that a firm is a “black box” operated so as to meet the relevant marginal conditions with respect to inputs and outputs, thereby maximizing profits, or more accurately, present value. The theory helps to explain: i) why an entrepreneur or manager in a firm which has a mixed financial structure (containing both debt and outside equity claims) will choose a set of activities for the firm such that the total value of the firm is less than it would be if he were the sole owner and why this result is independent of whether the firm operates in monopolistic or competitive product or factor markets; ii) why his failure to maximize the value of the firm is perfectly consistent with efficiency and; iii) why accounting reports would be provided voluntarily to creditors and stockholders, and why independent auditors would be engaged by management to testify to the accuracy and correctness of such reports.

Conceptual Review

Conceptual review explains the interrelationship among variables. It essentially represents an 'integrated' way of looking at the problem (Liehr and Smith 1999). Thus, a conceptual review may be defined as an end result of bringing together a number of related concepts to explain or predict a given event, or give a broader understanding of the phenomenon of interest or simply, of a research problem. Specifically, this section looks at the concept of internal control, co-operative credit union and the concept of firm performance.

Co-Operative Credit Unions

Diekmann (2012), established the difference between Credit unions and other banking institutions in his study by stating that "Credit unions differ from banks and other financial institutions in that those who have accounts in the credit union are its members and owners, and they elect their board of directors in a one-person-one-vote system regardless of their amount invested." He further states that "Credit unions offer many of the same financial services as banks, but often using a different terminology; common services include share accounts (savings accounts), share draft accounts (checking accounts), credit cards, share term certificates (certificates of deposit), and online banking". Normally, only a member of a credit union may deposit or borrow money.

According to Diekmann (2012), "surveys of customers at banks and credit unions have consistently shown a significantly higher customer satisfaction rate with the quality of service at credit unions". Thus, he observes the higher satisfaction level of clients in credit unions by stating that "credit unions have historically claimed to provide superior member services and to be committed to helping members improve their financial situation than banks". He again noted that Credit unions are "not-for-profit" because "their purpose is to serve their members rather than to maximise profits".

Credit unions have continuously become more bank-like in the product and service they offer over the past two decades. The study by Wilcox (2006) and Walter (2006) concluded that many of the conventional relevant differences between credit unions and commercial banks have seriously waned, but that some remain". According to Walter (2006) in addition to holding uncollateralized, short-term consumer loans, credit unions now often devote large shares of their assets to credit cards, residential mortgages, auto loans, and business loans. This is because credit unions enjoy taking advantage of loosening regulatory restrictions on the ground of membership, defining the criteria for becoming borrower and depositor at credit unions (Feinberg &Kelly, 2003).

Historically, many credit unions had fields of membership defined, for example, "as the employees of single plants of a business" (Feinberg and Kelly, 2003). Wilcox (2006) thus is emphatic in stating that many credit unions have criteria of membership, for instance, that include collections of enumerated companies, the employees of many specialized companies in a particular industry (e.g., airlines, health care), the self-employed workers of an industry (e.g., flower shop owners, real estate brokers,), or the entire residents of a geographic area, such as counties (Wilcox, 2006). With their expansive platform of membership, credit unions in many countries possess potential and actual memberships including not only employees on payroll, but also small businesses owners and thus seek business loans.

According to Hannan (2002), "the origins of the modern credit union movement can be traced to cooperative pioneers in Germany". He states that during the 19th century two types of institution emerged, namely, the Schulze-Delitzsch and Raiffeisen credit societies. These societies are "recognized as being the antecedent of modern-day credit unions, Hermann Schulze-Delitzsch, a politician and judge, founded the first urban credit cooperative in 1850". Friedrich Wilhelm Raiffeisen, a mayor in the western Rhineland area, formed the first rural credit cooperative in 1864. "Raiffeisens first cooperative venture was strikingly similar to that of Schulze-Delitzsch, but where Schulze-Delitzsch worked to aid urban craftsmen and proprietors, Raiffeisen concentrated his efforts on helping the farmers" (Hannan, 2002).

Performance and Performance Measurement

Organisational performance encompasses accumulated end results of all the organisation's work processes and activities. Performance measures can be financial or non-financial. Both measures are used for competitive firms in the dynamic business environment. Financial measures of organizational performance include; return on assets, return on sales, return on equity, return on investment, return on capital employed and sales growth (Gerrit & Abdolmohammadi, 2010). According to Donald and Delno (2009), appropriate performance measures are those which enable organisations to direct their actions towards achieving their strategic objectives.

Gerrit and Abdolmohammadi (2010) contends that performance is measured either by subjective or objective criteria. Subjective measures include difficulties with collecting qualitative performance data from small firms and with reliability of such data arising from differences in accounting methods used by firms whiles Brennan and Soloman(2008) found out that, objective performance measures include indicators such as profit growth, revenue growth, return on capital employed. Brennan and Soloman (2008) however, mentions other financial measures to include value of long-term investment, financial soundness, and use of 30 corporate assets. He also talks of non-financial performances measures to include; innovation, ability to attract, develop, and keep talented people, quality of management, quality of products or services, and community and environmental responsibility. Donald and Delno (2009) mention accounting based performance using three indicators: return on assets (ROA), return on equity (ROE), and return on sales (ROS). Each measure was calculated by dividing net income by total assets, total common equity, and total net sales, respectively. This study however, did not only use financial performance in measuring the effect of internal controls but rather included other dimensions of performance as noted by the balance scorecard.

Internal Control Practices or Components

Yang and Guan, (2004) identified five main analogous components of internal control. These are control environment, risk assessment, control activities, information and communication, and monitoring. This section discusses these components in relation to the subject under study.

Control Environment

Control environment defines the strength of the organization and influences the self-awareness of its people. It is the bedrock for all the other components of internal controls (Anthony, 2004). Success (2004) states that control environment is the consciousness of the organization, thus, the atmosphere that compels organizational members to conduct their activities and responsibilities as per the laid down control objectives. According to Lower (1998), an effective control environment is where competent people understand their responsibilities, the limits to their authority, and are knowledgeable, mindful, and committed to doing what is right and doing it the right way. Jenny and Pamela (2006) assert that “a governing board and management enhance an organisation’s control environment when they establish and effectively communicate written policies and procedures, a code of ethics, and standards of conduct”. They also strengthen the control environment acting in an ethical manner thus creating a positive environment for management and when such same standard of conduct is required from everyone in the organization.

The institute of Internal Auditors looks at control environment as one that dictates upon organizational members a feeling of consciousness that their continued stay at an organization is assured by demonstration of their expected level of competence as well as their comprehension of authority and responsibility limits. In this respect, organizational members feel and realize that they are accountable to the organization (Adel, 1999). Adebanjo et. al., (2013) disclosed that under such an environment, the organizational members utilize the available resources efficiently and effectively hence, achieving the expected organizational performance.

On the other hand, Adebanjoet.al (2013) views control environment as an enabler of execution of tasks by organization members as set by the board members and departmental managers through attitudes and actions that encourage the highest level of integrity, appropriate leadership philosophy, operating style and personal and professional standards, thereby leading to reasonable compliance and operational efficiency levels. Ishumgisa (2001) also noted that control environment makes organizational members aware of the job requirements and efficiency expected of them to carry out tasks that translate in the overall organizational performance. Spillane & Reimer (2000) subscribed to the view that control environment exists when the responsibility to execute assigned task is not directed by anyone but rather consciously dictated upon organizational members, and also when members find themselves obeying, observing and responding to the desired organizational culture, operations and activities as efficiently and effectively declared.

This environment creates the organisational atmosphere, influences consciousness of control, and provides a footing for an effective system of internal control. Control environment also grants the structure and discipline for achieving the primary objectives of internal control. (Lannoye, 1999). This means that the board of directors must show concern for ethical values and integrity. There is also the need of a code of conduct and/or ethics policy which must be sufficiently communicated to all levels of organization. Also, there must be an appropriate structure, which is not dominated by one or a few individuals and an effective oversight by the board of directors or audit committee. Management also needs to put a mechanism in place to regularly educate and communicate to management and employee the importance on internal controls, and to raise their level of understanding of controls.

Control Activities

Control activities has been defined by Craig (1999) as the administrative and supervisory actions that management engages in to keep the organization focused and cautious in addition to keeping members effective and efficient at task execution. Adel (1999) considers control activities as activities that provide evidence that a loss has occurred. They include; analysis, reconciliations, and reviews. He emphasised the importance of authorizations in the form of expenditures as a result of an approved budget as a control activity. Approval of budget expenditure should involve questioning of unusual items, justification of the transaction and review of source documents (Van Horne, 2002). Control activities are actions supported by internal control objectives, procedures and policies that enable managers to address risk timely, effectively and efficiently (Steeves, 2004). He further categorized the activities as preventive and detective.

Managerial and administrative measures that are pro-active in nature and prevent undesirable events from occurring are what he referred to as preventive controls. They comprise; proper authorization, segregation of duties, sufficient documentation, and physical control of assets. COSO (2004) considers control activities as policies and procedures established to address risks and to achieve the entity's objectives. To be effective, control activities need to function consistently according to plan throughout the period, be appropriate, comprehensive and be cost effective, reasonable, and directly relate to the control objectives.

Control activities occur throughout the organization, at all levels and functions. They include a range of preventive and detective activities for example; authorization and approval procedures, segregation of duties (authorizing, processing, procuring, recording, receiving), controls over access to resources and records, verifications, reconciliations, reviews of operating performance, reviews of operations and activities, and supervision (assigning, reviewing and approving, guidance and training), among others. APB (1995) noted that under reviews of performance, management compares information about current performance to budgets, forecasts, prior periods, or other benchmarks to measure the extent to which goals and objectives are being achieved and to identify unexpected results or unusual conditions that require follow-up.

According to Pandey (1998), COSO (1998), Anthony (2004); control activities comprise of the policies and procedures that help to ensure that management directives are carried out. They contend that activities supported by policies and procedures when carried out properly and in a timely manner, manage or reduce risks. Whiles managers are responsible for identifying financial and compliance risks for their operations, they also have line responsibility for designing, implementing and monitoring their internal control systems added (Bebchuk, Cohen, & Ferrel, 2000).

Risk Assessment

In 2004, the committee of sponsoring organisations (COSO) defined risk assessment as the process of identifying and analysing of relevant risks to the achievement of the entity’s objectives and determining the appropriate response. It includes risk identification from external and internal factors, at the entity and the activity levels, risk evaluation, assessment of risk appetite of the organization and the developing responses of all the risks in the organization (COSO, 2004). There are four types of responses to risk which must be considered; transfer, tolerance, treatment, or termination. The appropriate controls can be either preventive or detective. According to Jenny & Pamela (2006), risk assessment refers to the identification and analysing of relevant risks to the achievement of objectives, forming a basis for how the risks should be managed. Thus, setting objectives is a precondition to internal controls.

At the highest levels, goals and objectives should be presented in a strategic plan that includes a mission statement and broadly defined strategic initiatives (Nakazi, 2002). In a similar view, Gleiling (2005) noted that at the departmental level, goals and objectives should be classified in the following categories; operational, financial, and compliance objectives. A clear set of goals and objectives is fundamental to the success of an organization. Specifically, a department or work unit should have a mission statement, written goals and objectives for each significant activity (Manashe, 2000).

Furthermore, goals and objectives should be expressed in terms that allow meaningful performance measurement (Gleiling, 2005). In this regard, Mitchell, Agle and Wood (1997) lamented that there are certain activities which are significant for all organizations such as; budgeting, purchasing goods and services, hiring employees, evaluating employees, and safeguarding property and equipment.

Cochran (2000) considers the identification of risks as important for the achievement of the organization objectives because an effective internal control system, no matter how well conceived, and operated, can provide only reasonable- not absolute-assurance to management about the achievement of an entity's objectives. He says that managers should determine what can go wrong, what areas have the most risk, what asset are at risk, and who is in a position of risk. The risks may include; public scandal, misuse of revenues, assets and personnel, and also the use of unreliable information for decision making. Alternatively, Smith (2005) considers identification of risks as a challenge to some organizations. The internal controls can give management information about the entity's progress or lack of it towards achievement of objectives but cannot change an inherently bad manager into a good one

Information and Communication Flow

According to the fourth internal control standard, for an agency to run and control its operations, it must have relevant and reliable information, both financial and non-financial, relating to external as well as internal events. That information should be recorded and communicated to management and others within the agency who need it and, in a form, and within a time frame that enables them to carry out their internal control and operational responsibilities (Steihoff 2001). Steihoff, further states that all stakeholders should have information communicated to them in the forms they need it and also within time frames that would help them carry out their responsibilities. Information was stated to have the following characteristics; being appropriate, timely, current, accurate, accessible, reliable and relevant therefore transactions should be promptly recorded and properly classified.

According to Hevesi (2005) information and communication are essential to effective control. Information about an organization's plans, control environment, risks, control activities, and performance must be communicated up, down, and across an organization. Reliable and relevant information from both internal and external sources must be identified, captured, processed, and communicated to the people who need it in a form and timeframe that are useful.

ACCA (2005) considers information flow as a process through which the right organizational members receive the right information at the right time. Here, formal and informal channels information flows are noted. Formal channels comprise of downward or top down, upward or bottom up and horizontal or lateral forms. The informal channels comprise majority grapevine. It is further noted that for information to achieve its intended purpose, it must be identified, captured, processed and communicated in an authentic, useful and timely manner. In addition, the information communicated must be reliable, accurate, complete, specific, understandable, directed to the right people and relevant to the intended users.

Semanda (2001) considers the bottom up channel as a carrier of feedback from subordinates to management and involving verbal and nonverbal communication. According to Stahl (1987), verbal method constitutes management subordinate consultations, face to face discussions, and negotiations while nonverbal methods constitute written reports and suggestion boxes. Such interactions between management and subordinates are pivotal in motivating subordinates towards achievement of expected organizational performance given their democratic nature. According to Suzanne and Naidoo (2005), the top down channel mostly occurs in an impersonal nature leading to information flow ambiguity, clear message delivery failure to subordinates contrary to what is intended by management. However, the bottom up channel supplements the top down to enable management attain desired organizational effectiveness. This was elaborated by Sudha (1999) who said that organizations using the top down channel tend to suffer information gaps, misunderstandings and consequently performance deficiencies.

Sudha (1999) also stated that lateral information flow is needed to coordinate tasks, share information, resolve conflicts and solve problems. In this case, lateral information flow is the communication between groups of people at the same level and thus, information flow between colleagues, departments or units. The author warned that poor lateral communication breeds malicious messages, rumors and confusion that in turn would hurt employees and the overall organizational performance. Byekwaso (2000) emphasised the need for a two-way form of information flow to achieve the desired organizational performance because both information flows facilitate the implementation of planned activities. However, he stressed the need for guidance of this information by internal control objectives.

Internal controls also cover the aspects of information and communication systems or processes that support the identification, capture, and exchange of information in a form and time frame that enables people to carry out their responsibilities (Walker, Shenkir& Burton, 2003). Chen (2004) said that information systems provide reports containing operational, financial and compliance related information that make it possible to run and control an organization. However, information and communication are essential to effecting control; information about an organization’s plans, control environment, risks, control activities, and performance must be communicated up down and across an organization (Wales, 2005). He emphasized 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 tine frame that is useful.

Monitoring and Evaluation

Monitoring is the assessment of internal control performance over time; it is accomplished by ongoing monitoring activities and by separate evaluations of internal control such as self-assessments, peer reviews, and internal audits. The purpose of monitoring is to determine whether internal control is adequately designed, properly executed, and effective. Internal control is adequately designed and properly executed if all the five internal control components are present and functioning as designed (Springer, 2004). Di Napoli (2007) also adds to that stating that monitoring "is the process that assesses the quality of the system's performance over time which includes ongoing monitoring activities, separate evaluations or both combined". He further stated that management should focus their efforts on the internal controls of the organization to help them achieve the organization objectives or mission but he emphasized that for monitoring to be effective, there was the need for all employees to understand their own responsibilities, the organizations risk tolerance levels, mission and objectives

The Institute of Internal Auditors (1995) considers monitoring to encompass activities such as periodical evaluations, internal audits and management self-assessments. COSO (1998), Adel (1999), Alexander (2001) and Lary (2009) view monitoring as needed to ensure that planned administrative, operational and financial tasks and activities are carried out in a timely and proper manner such that set internal control objectives and organizational performance are achieved. Monitoring aims at determining whether organizational members are carrying out or have carried out their tasks efficiently and effectively as required by the organization's policies (Spillane, & Reimer, 2000).

According to Walker, Shenkir and Buton (2003), monitoring processes are used to examine the quality of the performance of internal control over a specific period. Monitoring is therefore the evaluation of internal control performance over time. It is fulfilled by on-going monitoring activities and separate assessment of internal control such as peer reviews, self-assessments, and internal audits. According to Anthony (2004), the purpose of monitoring is to predict whether internal control is sufficiently designed, properly implemented, and effective. Internal control is adequately created and properly executed if all the five control components are present and functioning as designed. Internal control is effective if management and interested stakeholders have reasonable assurance that they understand the extent to which operational objectives are achieved. Published financial statements are being prepared reliably, applicable laws and regulations are being compiled.

Types of Internal Control Systems

Lousteau (2006), the State University of New York, (2007), and Di Napoli (2007) identified the types of internal controls systems to include directive controls, preventive controls, compensating controls, detective controls, and corrective actions. Kisner (2007) equally agrees with Lousteau, State University of New York and Di Napoli as he also identified preventive controls, detective controls and corrective actions. Kisner further states that they are sometimes actions taken to correct errors that might have been created earlier. This section discusses the types of internal control systems.

Directive Controls

Directive Controls relate to policies that are designed by management to promote compliance with independent rules (COSO, 2013). To ensure conformity with directive controls, a clear, consistent message from management which communicates that the designed policies and procedures are of prime importance must infiltrate the organization. They provide evidence about occurrence of loses and yet fail to prevent the occurrence of losses. Such detective controls include analyses, reviews, reconciliation, physical inventories, variance analyses, and audits. However, detective controls play crucial role in providing proof that preventive controls are operating and losses are prevented. Control activities include approvals, authorizations, verifications, reconciliation, and reviews of performance, security of assets, segregation of duties, and controls over information systems (Di Napoli, 1999).

Preventive Control

Preventive controls are measures that firms take to prevent noncompliance with policies and procedures. They are proactive measures put in place to hind losses. Preventive controls include adequate documentation, proper authorization, separation of duties, and physical control over assets (Lousteau, 2006). Kisner (2007) equally added that preventive types of internal controls were designed to avoid errors that is, it keeps errors from occurring, for example, a system that stops an erroneous payment before disbursement.

Compensating Controls

Compensating controls are intended to make up for a lack of controls elsewhere in the system. For example, firms with an electronic database could maintain a hard copy of the client list in the office library. Such a list would compensate for downtime in electronic systems and difficulties in locating client names in an electronic system. While the list would have to be reprinted from time to time to add new clients would mitigate some of the obsolescence that exists with hard Copies. The compensatory controls are similar to corrective internal controls as referred to by Kissner (2007) in which he stated that compensatory or corrective internal controls were meant to correct errors or irregularities that have already been detected. An example is a follow up action to resolve a detected error.

Detective Controls

Detective controls are aimed at uncovering problems after they have occurred. Although necessary in a good internal control system, detection of an independence violation after the fact is less desirable than prevention in the first place. Detective controls rarely work well as a deterrent in the absence of severe penalties (Lousteau, 2006). According to Kissner (2007) detective internal controls are meant to detect errors or irregularities as and when they occur. This type only detects the errors after they have occurred, such as system reports that filter payments after disbursement.

Challenges/Limitations of Internal Control Systems

Literature identified some challenges with internal controls. This section discusses these challenges that the CUs may face while using the ICs.

Judgment

The effectiveness of controls will be limited by decisions made with human judgment under pressures to conduct business based on the information at hand. According to Lannoye (1999), effective internal control may be limited by the realities of human judgment. Decisions are often made within a limited time frame, without the benefit of complete information, and under time pressures of conducting agency business. These judgment decisions may affect achievement of objectives, with or without good internal control. Internal control may become ineffective if management fails to minimize the occurrence of errors, for example misunderstanding instructions, carelessness, distraction, fatigue, or mistakes.

Breakdowns

Even well-designed internal controls can break down. Employees sometimes misunderstand instructions or simply make mistakes. Errors may also result from new technology and the complexity of computerized information systems.

Management Override

High level personnel may be able to override prescribed policies and procedures for personal gain or advantage. This should not be confused with management intervention, which represents management actions to depart from prescribed policies and procedures for legitimate purposes. With Lannoye (1999), management may override or disregard prescribed policies, procedures, and controls for improper purposes. Override practices include misrepresentations to state officials, staff from the central control agencies, auditors or others. Management override must not be confused with management intervention (i.e. the departure from prescribed policies and procedures for legitimate purposes). Intervention may be required in order to process non-standard transactions that otherwise would be handled inappropriately by the internal control system. A provision for intervention is needed in all internal control systems since no system anticipates every condition.

Collusion

Control systems can be circumvented by employee collusion. Individuals acting collectively can alter financial data or other management information in a manner that cannot be identified by control systems. The effectiveness of segregation of duties lies in individuals' performing only their assigned tasks or in the performance of one person being checked by another. There is always a risk that collusion between individuals will destroy the effectiveness of segregation of duties. For example, an individual who receives cash receipts from customer can collude with the one who records these receipts in the customers' records in order to steal cash from the entity (Williams, 2000).

Design Flaws

The designs of internal control systems of organizations often have shortcomings due to one reason or another. In designing such systems, the management of the organization has to pay critical attention to the organizations` environment, operations and the risk involved in a particular situation. But most often than not most management try to design internal control systems by adopting other organization's own without scrutinizing it to befit their organization's prevailing operations conditions. This often leads to lapses when it comes to some risk and unnecessary inefficiencies in operations and management (Asante, 2011).

Poor Implementation

Poor implementation would lead to even the best designed internal controls not achieving any objective as it is the duty to of everyone in the organization no matter the level of management to play his or her part by complying with the internal control process and serving as each other's keepers to enable the internal controls achieve their objectives. Managers mostly play a supervisory role in ensuring that every staff member complies with the internal controls of the organization to help it achieve its set objectives. It is worth mentioning that the internal controls should be one that staff would be comfortable working with at all times and would not ignore in times of stress and pressure. Internal controls should be properly implemented such that staff members understand and appreciate their essence such that they would own the process (Asante, 2011).

Poor Response to Reported Anomalies

It is part of the design of internal control systems to draw attention to events that depart from their normal expectations. It is therefore necessary that when attention is drawn to such events, management should promptly act on them to resolve them in order to make internal controls effective. The event that departs from its normal expectation should be investigated promptly to identify the irregularities involved and then corrective actions should be started right after identification of the irregularities. A failure to act on reported anomalies would render the internal control system of the organization ineffective and inefficient. Caution should also be taken to avoid the raising of anomalies which are false and when such becomes frequent, they may lead to ignoring true anomalies (Pridgen, 2007).

Personnel Errors or Mistakes

According to Williams (2000), the internal control system of an organization is as effective and efficient as its personnel who implement them and ensure they are functioning properly. A typical example of such errors is the misunderstanding of orders which will lead to the judgment error. Other causes of errors include; fatigue, carelessness, distractions, stress etc. It is therefore very important for organizations to pay serious attention to their personnel as the errors of personnel will create other errors which are not expected at all. The organization should therefore be critical with the types of personnel they employ and the working conditions of the employees should also be critically examined to help reduce some of these errors. Computerized systems could also be kept in place to help minimize human errors.

Performance and Performance Indicators

Firm's performance can be judged by many different constituencies, resulting in many different interpretations of successful performance. Each of these perspectives of firm performance can be argued to be unique. Performance management can take many forms from dealing with issues internal to the firm to catering to stakeholders or handling issues in its environment. According to Sunday (2015), the concept of firm performance is based upon the idea that a firm is the voluntary association of productive assets, including human, physical, and capital resources, for the purpose of achieving a shared purpose. Those providing the assets will only commit them to the firm so long as they are satisfied with the value they receive in exchange, relative to alternative uses of the assets. As a consequence, the essence of performance is the creation of value. So long as the value created by the use of the contributed assets is equal to or greater than the value expected by those contributing the assets, the assets will continue to be made available to the firm and the firm will continue to exist (Junaidu & Sunusi, 2014).

The concept of firm performance needs to be distinguished from the broader construct of organizational effectiveness. Venkatraman and Ramanujan (2010) offered an enlightening figure of three overlapping concentric circles with the largest representing organisational effectiveness. This broadest domain of organisational effectiveness includes the medium circle representing business performance, which includes the inner circle representing financial performance. Organisational effectiveness covers other aspects related to the functioning of the organisation as absence of internal strain and faults, engagement in legitimate activities, resource acquisition and accomplishment of stated goals (Cameron, 2016; Sufian & Chong, 2018). Business performance, or performance of CUs as we refer to in this study, is a subset of organisational effectiveness that covers operational and financial outcomes.

In most cases, financial performance was used (82%) with accounting measures of profitability being the most common choice (52%). Carton and Hofer (2016) and, Richard, Devinney, Yip and Johnson (2017) reported a similar picture, analysing different journals in other time periods. Both studies reported a rate of indicator per article of close to one. Another source of confusion is the use of antecedents of performance as performance indicators (Cameron, 2017). Combs, Crook and Shook (2017) argue that the operational performance as described by Venkatraman and Ramanujan (2010) is best viewed as an antecedent of financial performance. The argument has merit and is quite clear in some cases, like production efficiency.

According to Brown (2013), performance measures in organisations must focus attention on what makes, identifies and communicates the drivers of success, support organisational learning and provide a basis for assessment and reward. Other researchers (Douglas, 2015; Drucker, 2014) are of the view that appropriate performance measures are those which enable organisations to direct their actions towards achieving their strategic objectives. This is because according to them, a firm's performance is central to the future well-being and prosperity of any enterprise.

Study by Whyte, (2013), shows that performance can be measured at both organisational and individual levels. This measurement is sometimes referred to as performance appraisal. Whyte argues that organisations have desired potentials in terms of capacity, attraction, manual share and financial strength, and performance is the difference between those potentials and those that have been achieved. Whyte added that human capital asset accumulation has significant impact on the organisations` ability to introduce new products, compete within markets, thus influencing the level of performance. It increases knowledge base within the organisation's success and performance.

O'mara (2013) asserts that availability and level of resources can also be used to analyse the performance of an organisation. According to O'mara (2013), resources which may include assets, finances, employee skills and organisational process are key indicators of the organisation's performance one time. In agreement with this, Robins (2014) suggested that resources could be grouped into physical, human and capital resources and that a firm can increase its performance only when the firm is unable to imitate its resources. Robins added that although a strong financial performance indicates a strong institution, qualitative indicators like the nature of management and education level of labour force must supplement the quantitative indicators in order to enable the enterprise's ability to meet its focus and objectives.

Drucker (2014) contended that performance should be measured in terms of customer satisfaction. Drucker further argued that in order to be able to perform, organisations should critically look at their customers and know how best they are satisfying their needs. He added that, organisations should continuously improve on their services through innovations and great values. The assertions of Drucker (2014) is in line with that of Saani (2013) who avers that in order to assess performance, organisations should be examined in terms of quality of services, flexibility, utilisation and innovations. The current study considered performance of CUs as composite of return on asset (ROA), return on investment (ROI), return on sales (ROS), goal achievements, quality of service, and effective use of resources.

According to Devinaga (2016), researchers who paid more attention to the discovery of the determinants of a firm's performance and profitability classified them into two main factors. These are the internal and the external factors. The internal determinants of profitability are made up of factors that can be controlled by the firm. Thus, it is within the power of the firm to determine the level these factors should take. These determinants have effect on both the revenue and cost incurred by an enterprise. Some works have divided these determinants into two groups. They are the financial statement variables and non-financial variables. The financial statement variables have a direct effect on both the financial statement and the statement of financial position of the enterprise and the non-financial statement variables consist of factors like the number of branches of a particular enterprise, location, number of employees and firm size (Haron, 2014).

Credit Unions play different roles through which income is generated. One of these roles is the collection of member deposits, and lending of loanable funds to credible and reliable borrowers. It has been established that the deposit collection and lending of funds for interest is one of the main avenues through which CUs make profit. This means that, the more CUs receive deposits and lend their funds to credible and reliable borrowers, the more they grow in terms of membership and profit. However, CUs have to tread cautiously because this exposes them to liquidity and default risks which affect the profit, growth and survival of the enterprises (Devinaga, 2016). For instance, the national liquidity challenges that CUs in Ghana are facing are deeply rooted in the ineffectiveness of internal control systems and strategies that engulfed CUs in Ghana.

Credit unions in Ghana are experiencing some level of profit, in spite of the continuous increase in non-payment of loans by creditors and declining membership. This shows that anytime the assets of CUs are not put into efficient and effective use and bad debt rises, the financial strength of the enterprise begins to decline and this can cause the enterprise to collapse if immediate steps are not taken (Alalade, Binuyo & Oguntodu, 2014). Therefore, it is important to put effective measures (internal control systems) in place to enhance the quality of services and the general performance.

In determining the financial strength of an enterprise, the level of profitability is predominant. According to Vong and Hoi (2014), profitability performance will concentrate on the income statement which shows how much is generated, how much is spent of net income. This may be prepared by enterprises on a monthly, quarterly or annual basis. According to Uhomoibhi (2018), profitability can be measured in a number of ways. They include return on assets (ROA), return on equity (ROE), return on sales (ROS), and return on investment (ROI). But over the years, most researchers prefer using ROA and ROE to measure the profitability of financial institutions.

The definition of firm performance and its measurement continues to challenge scholars due to its complexity. In this study, the study attempts to contribute to this effort by creating and testing a subjective scale of performance that covers the domain of business performance in the works of Venkatraman and Ramanujam (2010). The study based its performance argument in the agency theory, system theory, and the contingency theory, which allow distinguishing between performance antecedents and outcomes. The assumptions of the theories also provide a conceptual structure to define performance indicators and dimensions (Aduda & Gitonga, 2018).

The current study made use of ROA, ROI, ROE, ROS ratios to measure the performance of the CUs. Gizaw, Kebede and Selvaraj (2013) and Aduda and Gitonga (2018) both used ROA and ROE in measuring performance of commercial banks. In theory, the ratios show the capacity of a firm's management to make profits using the level of asset and equity available. As indicated earlier, ROA, ROE, ROS, ROI, effective use of resources, quality service, and achievement of objectives were the dimensions used to measure the performance of the credit unions under this study.

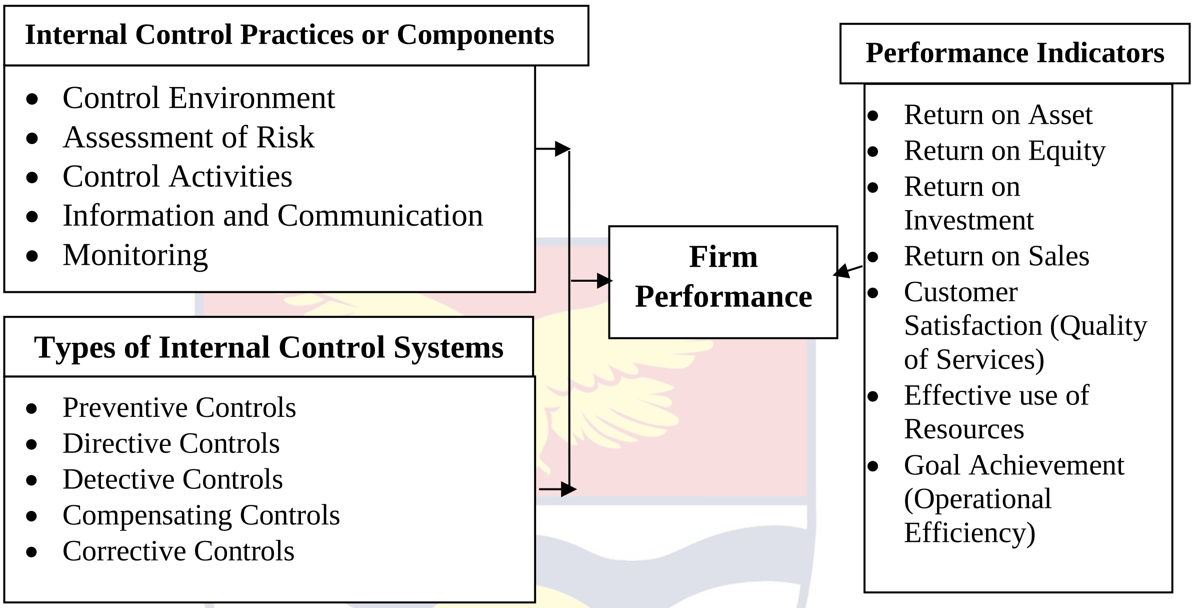
Conceptual Framework

The conceptual framework of the study was designed based on the ideas obtained from the argument of the agency theory, system theory, the theory of the firm and the contingency theory, and the findings of various empirical studies reviewed. The framework is made up of three main variables: the internal control components or practices, types of internal control, and firm performance, which is being used here to measure the effectiveness of the internal control systems used in the firm.

Internal control practices include environment control, assessment of risk, control activities, information, communication, and finally monitoring. Internal control practices enhance efficiency of operations by application of standardized procedures. Internal control practices also provide the reliability of financial reporting; assist management in making proper and good financial decisions and identification and elimination of fraudulent acts within a business entity (Uzun, 2011).

It is believed that the types of internal control systems available and used in a firm would have a significant effect on its performance. Different writers have come out with different types of internal control systems. Milichamp (2002) posits type of internal control as; Safeguarding assets, Separation of duties, supervision, Verification, Approval and authorization, Documentation, and Reporting. However, many other scholars such as DiNapoli (2005) and Lousteau (2006) agree that the types of internal controls include preventive controls, directive controls, detective controls, compensating controls, and corrective actions. This study made use of internal controls systems as identified by DiNapoli (2005) and Lousteau (2006).

The dependent variable, thus, performance of CUs in the Brong Ahafo region of Ghana, was made up of seven indicators: ROA, ROE, ROI, ROS, effective use of resources, quality of service, and goal achievement. See Figure 1 for pictorial representation of the conceptual model of the study. Figure 1 portrays that the available internal control systems and the internal control practices or component (independent variables) used by the CU will affect the performance of the CU, and are measured using multiple indicators or dimensions.



Source: Author`s own Construct, Angtuongba, (2017)
Figure 1: Conceptual framework showing the effects of Internal Control on the performance of Credit Unions

As indicated earlier, performance of CUs is also measured numerically using multiple dimensions. This study argues that, the available type of internal control systems and internal control practices or components are positively related to performance of the CUs. Also, it hypothesised that the available type of internal control systems and internal control practices or components have significant influence on performance of CUs in the Brong Ahafo region of Ghana. That is, when the available type of internal control systems and internal control practices or components of the enterprises are in positive terms and allow to play their roles as required by the reasonable assurance concept, they will help boost their profitability significantly. This dynamic in the long run will help enhance the performance of the credit unions as a whole.

Empirical Review

Empirical review of literature is concentrating on previous research results or findings that the researcher wants to study, compare, and cite to construct reliability, validity, correlations, and strength of relationship between past study`s constructs and the current one. Empirical literature review details previous empirical studies (not theoretical analysis) that have been done on the topic or concepts under study, by other researchers and the findings that emerged. Here, the key issues are the problems focused upon, the methodology adopted and the key findings and conclusions. This section presents empirical reviews on the effects of internal control on the performance of credit unions.

Elder, Zhang, Zhou, and Zhou, (2010) used a sample of 2350 firms to study auditors' client risk management in the first year of the Sarbanes- Act Oxley (SOX) 404 implementation, and found that a pecking order exists among auditors' strategies to manage and control risk resulting from internal control weaknesses. Elder, et al., (2010) examined the relationship between internal control weaknesses and audit fees, modified opinions, and auditor resignations, respectively, and established that these are viable strategies to manage control risk on a stand-alone basis. They also found out that changes in audit fees and changes in modified opinions are positively associated with changes in reported internal control weaknesses. When they investigated these strategies simultaneously, descriptive evidence suggests that a pecking order exists among auditors' client risk management strategies. Their comprehensive evidence suggested that auditors use an array of ordered strategies to manage client-related control risk.

Jones (2008) compared Internal control, accountability and corporate governance in Medieval and modern Britain. He used a modern referential framework (control environment, risk assessment, information and communication, monitoring and control activities) as a lens to investigate medieval internal controls used in the twelfth century royal exchequer and other medieval institutions. He demonstrated that most of the internal controls found today were present in medieval England. Stewardship and personal accountability were found to be the core elements of medieval internal control. The recent recognition of the need for the enhanced personal accountability of individuals is reminiscent of medieval thinking.

Morteza, Parviz and Shima (2015) assessed the existence of the relation between internal control system and performance in financial perspective of Telecommunication Company of Golestan province in Iran. The study revealed a significant and positive relation between internal control system and performance in financial perspective of the Telecommunication Company of Golestan province. Thus, the study concluded that existence of system of internal control influence financial performance positively and an internal control system seems to be necessary for effective performance.

Haat (2012) assessed the relation between internal controls on SME performance. A significant relation between implementation of internal control and SMEs performance in financial perspective was established. In addition, the study revealed that most of the SMEs in Malaysia were ready to implement internal controls but the concept was still in primitive stages and that most SMEs lack of awareness on the advantages of internal control to their businesses.

Mwakimasinde, Odhiambo and Byaruhanga (2014) examined effect of systems of internal control on performance in financial perspective of sugarcane out grower firms in Kenya. The study adopted a descriptive correlational survey design and collected data using questionnaires. In addition, the study used the key informant's method where is obtained data from all the finance managers and heads of internal audit for every out-grower company. The data collection instrument was administered to all the nine sugarcane out grower institutions. The study findings revealed a positive significant effect of systems of internal control on performance in financial perspective.

Shamsuddin and Johari (2014) explored effect of internal auditing towards systems of internal control effectiveness in higher learning institutions in Selangor. Systems of internal control were looked from the perspectives of environment control, assessment of risk, control activities, communication and information and monitoring. The study was conducted by reviewing previous studies as research designs. The study concluded that, internal audit may influence internal control system effectiveness of higher learning institutions and it needs to be proven empirically by fieldwork study.

Byaruhanga (2014) assessed effect of systems of internal control on performance in financial perspective of sugarcane out grower firms in Kenya. The study adopted a descriptive correlational survey design and collected data using questionnaires. In addition, the study used the key informant's method where is obtained data from all the finance managers and heads of internal audit for every out-grower company. The data collection instrument was administered to all the nine sugarcane out grower institutions. The study findings revealed a positive significant effect of systems of internal control on performance in financial perspective.

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Shima (2015) examined the existence of the relation between internal control system and performance in financial perspective of Telecommunication Company of Golestan province in Iran. The study revealed a significant and positive relation between internal control system and performance in financial perspective of the Telecommunication Company of Golestan province. Thus, the study concluded that existence of system of internal control influence financial performance positively and an internal control system seems to be necessary for effective performance.

Kamau, (2016) examined the effects of internal control practices on financial performance of small and medium enterprises in Nairobi, Kenya. The study revealed a significant and positive relation between internal control system and performance in financial perspective of the Small and Medium Enterprises in Nairobi, Kenya. Thus, the study concluded that the existence of system of internal control influence financial performance significantly positively and an internal control system seems to be necessary for effective financial performance.

Locally, Ebowessuman (2016) examined the effects of internal control systems on the financial performance of credit unions in the Sekondi-Takoradi Metropolis of Ghana. Like the other researchers who explored the field, he also concentrated on the financial perspective of performance to measure the effects of internal control of the credit unions within the Sekondi-Takoradi Metropolis. The study found that internal control has a significant positive effect on the performance of credit unions within the metropolis in the financial perspective.

A review of prior studies conducted shows that, most studies tend to focus on aspects of controls that relate to financial performance, and external auditors' work with no focus on performance reporting, organization structure, behaviour, quality of services, market performance among other non-financial indicators of performance. Moreover, no such study has been conducted on co-operative credit unions within the Brong Ahafo region of Ghana, which are required by the Bank of Ghana to incorporate enhanced better internal controls within their operation, that is in terms of governance, accountability and financial reporting.

Chapter Summary

This chapter began by introducing the theories adapted and used in the study. Then presented the conceptual views of relevance concepts to this study and later constructed a conceptual model to explain the relationship between internal control and the performance of the credits unions under the study. The chapter also provided the empirical justification for the effects of internal control on the perfomance of credit unions. Finally, the chapter provided the empirical justification for the study.

CHAPTER THREE

RESEARCH METHODS

Introduction

The survival of any organisation depends on the effective and efficient utilisation of resources (financial and non-financial) at the disposal of the organisation. Hence, to optimize the utilisation of resources entrusted to all employees in an organisation, various forms of controls are put in place by management of the organisation, among these major controls are internal control and internal audit, to mention but a few. This study examined the effects of internal control on the performance of co-operative credit unions in the Brong Ahafo region of Ghana. According to Kirsch, (2002), Internal control can be defined as a set of mechanism designed to motivate an individual or a group towards achievement of a desired objectives while, Ouchi (1979) stated that internal control must be able to achieve the objective of bringing about cooperation among people with divergent objectives in an organisation.

According to Donald and Delno (2009), appropriate performance measures are those which enable organizations to direct their actions towards achieving their strategic objectives. This study is in line with the views of Donald and Delno (2009), hence considered performance but not only financial performance.

This chapter looks at the systematic procedures used to assess the effects of internal control on CUs performance. Precisely, this chapter presents detailed discussion on the research design, research approach, data collection, and data sources, validity of the instruments used, and methods of data processing and analysis. It explains the various scientific methods used in achieving the objectives of this study.

Research Design

Saunders, and Lewis, (2012), noted that, research design can be either exploratory, descriptive or explanatory. A research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data (Dutton, 2014). This study examined the effects of internal control on the performance of co-operative credit unions in the Brong Ahafo region of Ghana. Since the study involved a survey of financial officers, accountants or employees in management position of the various CUs` views within the region on the issues, situations and processes, the study found it appropriate to use the descriptive research design. Therefore, the study employed descriptive research design. This design involves systematic gathering of data about individuals, groups and events in order to answer research questions concerning the current status of the subject of the study (Ary, Jacobs, Sorensen & Razavich, 2010). It determined and reports the way things are. Saunders, Lewis and Thornhill (2014) consider descriptive research design to be wholesome when information is needed about conditions or relationships that exist; practices that prevail; beliefs, points of view, or attitudes that are held or process that are going on.

In the view of Ary, Jacobs, Sorensen, and Razavich, (2010), descriptive design is appropriate because it allows the researcher to collect data to assess current practices for improvement. Ary et al. (2010), further point out that the design gives a more accurate and meaningful picture of events and helps to explain people’s perception and behaviour on the basis of data gathered at any particular time. An advantage of a descriptive survey is that it helps the researcher to collect data to enable him draw the relationship between variables and analyse the data. It helps to observe, describe and document aspects of a situation as it naturally occurs (Saunders et. al., 2014).

However, it is a relatively laborious and time-consuming method. It is susceptible to distortions through the introduction of biases in the measuring of instruments and so on (Malhotra & Birks, 2012; White, 2015). It is sometimes regarded as focusing too much on the individual level, neglecting the network of relations and institutions of society (Saunders et al., 2014). The study thus presented data systematically in order to arrive at valid and accurate conclusions. It helped in bringing out the issues, views and the characters as they were.

Research Approach

According to Creswell (2009), the choice of a particular study design depends partly on the research approach. There are three main approaches to research and they are, the quantitative research approach, the qualitative research approach and the mixed research approach (Creswell, 2014). Al – Hassan (2015) asserts that, if the nature of the study requires prediction of an outcome, identifying the influence of variables on an event, then, the best research approach is quantitative approach. Quantitative research is based mainly on the measurement of quantity in respect of the study variables. Al – Hassan added that, quantitative approach collects and presents data in quantitative form and subsequently subject the data to rigorous and formal quantitative analysis in a rigid fashion.

Also, Creswell (2014) explained that the quantitative research approach comprises the examination of relationships among variables to test objective theories. Since the testing of the relationships among variables requires the use of statistical procedures, the data should be measured quantitatively. Quantitative researchers at all points in time, deduce a set of hypotheses, derive models based on the set of hypotheses and finally generalize and replicate findings (Creswell, 2014). Per this position, one can clearly see that, quantitative researchers seek to search for causal relationships or consanguinity between variables so that it could be used for predictions.

From the foregoing argument, this study employed the quantitative approach to examine the effect of internal controls on the performance of co-operative credit unions in the Brong Ahafo region of Ghana, because hypotheses or research questions were deduced from theories, and models were constructed based on these deduced questions or hypotheses. Per the above and for the fact that quantitative research approach makes use of statistical analysis, the study adopted descriptive and inferential statistics (specifically, correlation, and regression) to analyse and interpret the data to answer the research questions which were set to guide this study to realize its objectives.

Study Area

The Brong Ahafo Region was created on 4th April 1959 (by the Brong Ahafo Region Act No. 18 of 1959). The Act defined the area of the Brong Ahafo Region to consist of the northern and the western part of the then Ashanti Region and included the Prang and Yeji areas that before the enactment of the Act formed part of the Northern Region. Brong Ahafo has 19 administrative districts, with District Chief Executives (DCEs) as the political heads. It covers an area of 39,557 square kilometres and the second largest region in the country (16.6%) and shares boundaries with the Northern Region to the north, the Ashanti and Western Regions to the south, the Volta Region to the east, the Eastern Region to the southeast and La Cote d'Ivoire to the west. The central point of the landmass of Ghana is in the region, at Kintampo.

Agriculture and related works are the major occupation in all districts, accounting for 66.4 per cent of the region's economically active population. It is the main occupation for about two-thirds of the economically active group in nine of the 13 districts. In the three most urbanised districts, Sunyani (45.9%) Berekum (50.9%) and Techiman (57.1%), Agriculture and related work account for between 45.0-60.0 per cent. Sene, the most rural district, in particular, has 4 out of 5 economically active population in this sector. Significant proportions of the economically active persons are engaged as Production, Transport operators and Labourers (11.3%), Sales workers (7.6%), and Professional and related workers (5.8%).

The region has 35 registered co-operative credit unions operating at the time of this study. All these 35 co-operative credit unions are also active members of the Co-operative Credit Unions Association of Ghana (CUA). The 35 CUs are classified based on their formation and purpose. They are made of two (2) parish or religious denomination based co-operative credit unions, eight (8) work place co-operative credit unions and the rest 25 are community based co-operative credit unions (CUA, 2017).

Population

The population of the study consisted of all registered CUs in the Brong Ahafo region. The CUs were categorised into three types based on the nature of formation and membership. These groups are the community based co-operative credit unions, work place co-operative credit unions and the parish or religious group-base co-operative credit unions. In all, 35 co-operative credit unions were available at the time of this study. All these 35 CUs are registered and members of the Ghana Co-operative Credit Unions Association (CUA). All the finance officers, accountants and other employees in key management positions of these businesses form the target population. This is because they are considered to have knowledge of key issues on internal control and its effects on the performance of the organisations.

Sample and Sampling Techniques

A sample is a small population. According to Mugenda and Mugenda (2003), any statement made about the sample should also be true of the population. In this study, the sample was selected in two stages, the first of which was the purposive selection of all registered co-operative credit unions within the Brong Ahafo region. The total number of co-operative credit unions available in the region at the time of this study was 35 (CUA, 2017). The selection of the credit unions was guided by the years of being in existence (age), number of staffs, number of departments and size of the credit union (considered as the number of branches) in the region. In all, eight co-operative credit unions were purposively selected for the study. These co-operative credit unions were made up of community co-operative credit unions, religious or parish co-operative credit unions and work place credit unions. These co-operative credit unions are Techiman Trinity Presby Co-operative Credit Unions, Yenina Presby Church Co-operative Credit Union, Calvary Fiapre Community Co-operative Credit Union, Dormaa Area Teachers` Co-operative

Credit Union, Ebenezer Co-operative Credit Union, Abosomankotere Co-operative Credit Union, Abotareye Co-operative Credit Union and Brekum Holy Family Co-operative Credit Union.

The second stage of the sampling involved listing of all staff in areas considered necessary to provide vital information needed for this study in each of the sampled credit union and a simple random sampling was used to select the respondents for the study. The number of respondents was estimated using estimation method given by Yamane (1967) as:

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

where n is the sample size; e = error level, estimated as; e = 1 – confidence level and N is the estimated total population of the target group. Assuming 95% confidence level, e = 0.05. The sample size of 167 was calculated based on a sample frame of 287 respondents for the eight selected co-operative credit unions. The sample was proportionally distributed among the eight selected co-operative credit unions as shown in Table 1.

Table 1: *Population and Sample Distribution of Respondents*

Co-Operative Credit Unions	Type	Pop. Size	Sample. Size
Abosomakotere	Workers	50	29
Abotareye	Community	45	27
Dormaa Area Teachers`	Workers	29	17
Calvary Fiapre	Community	33	19
Techiman Trinity Presby	Parish	31	18
Yenina Presby	Parish	29	17
Ebenezer	Community	35	20
Brekum Holy Family	Workers	35	20
Total		287	167

Source: Author`s own construct, Angtuongba, (2017), based on data extracted from CUA, (2017) The sample size for the study is in line with the views of Ary et al. (2010) and Cohen et al. (2014) who both opined that a sample size of five to ten percent (5%-10%) of the population is appropriate for a descriptive survey study. Supportively, Cohen et al. (2014), observed that, a sample size does not necessarily need to be large but how it represents the population is what one must look out for. This placed emphasis on respondents with relevant information or data about the phenomenon under study. As such, the study made use of respondents (financial officers, accountants and those employees in other positions of the credit unions) who are key employees and considered to have vital knowledge about the operations (internal control issues) of the credit unions were purposively selected for this study.

Data and Data Collection Instrument

Primary data was used in this study and it was collected from finance officers, account officers and other key employees in management positions in the sampled co-operative credit unions. Data for the study was collected through a self-administered structured questionnaire.

The instrument used in collecting data was questionnaire. A questionnaire is flaunted as one of the most widely used data collection instruments within the survey strategy. The questionnaire was administered to the respondents of the selected CUs in the Brong Ahafo region (See Appendix A). This helped the study to assess the practice of internal control and its effects on the performance of CUs in the region. The structured questionnaire was used (giving closed-ended items or questions) to help keep the study focused. This also made the administration, coding and analysis of the data easier.

Also, the questionnaire designed for the respondents was deemed appropriate for the study because it provided a much quicker means of gathering information from a fairly large literate population. In addition, it was economical, easy to construct and questions were consistent and uniform. The questionnaire also allowed anonymity of the respondents which made it easy for them to volunteer information without fear of victimisation (Kelly, 2016). However, in the view of Best and Kahn (2012) questionnaire is limited to literate population and does not provide an opportunity to collect additional information. In the case of this study, almost all the respondents captured with regard to the questionnaire were literate and were in a position to read and understand the items in the questionnaire as expected. Moreover, the study explained concepts and terms that appeared to be difficult to understand for the respondents in order to enable them answer them appropriately or provide the right information needed to achieve the objectives of this study.

Following Kelly (2016)`s caution concerning the classification and demographic questions seeking individuals` personal data, which they may find sensitive, thereby negatively impacting the likelihood of the respondent completing the questionnaire, the study did not ask questions, on individual`s personal details since it had no effects on the objectives of this study, except the department that they work in the sampled CUs. The questionnaire was in four parts. The first part drew information on the background of the respondent, the second section elicited data on internal control activities, whiles the third section looks at internal control components and the fourth section focused on firm performance and performance measurement of the selected CUs within the selected region under the study. The respondents were not given free chance to express themselves on diverse issues. That is, room was not given for individual subjective view on issues that were not influenced by the researcher. This helps to keep the study focused on the objectives.

Validity and Reliability of the Instrument

Validity, in the context of this study refers to how accurately the questionnaire was able to collect the responses from the respondents as intended by the study in order to tackle the specific objectives of the study. Furthermore, it is the degree to which the instrument accurately answered the questions it was intended to answer (Gravetter & Forzano, 2010). Both face and content validity of the questionnaire were ensured. The face validity of the study was granted by the researcher's peers, colleague workers and students, and some workers of some credit unions within the region. The content validity on the other hand was determined by the expert judgment of the assigned supervisor and other professionals in the field of financial management and accounting.

The study modified and deleted materials considered inaccurate or which the study felt infringed on the confidentiality of the respondents. The assigned supervisor and some professionals within the business fraternity further scrutinised unclear, biased and deficient items, and evaluated whether items were members of the subsets they have been assigned. A few modifications were done to improve the final instrument for the main survey which was then administered.

The questionnaire was pre-tested at some two co-operative credit unions within the Brong Ahafo Region of Ghana. Twenty-one (21) respondents were selected for the pretesting of the instrument. Respondents from the selected CUs were chosen because they share similar characteristics with that of those in sampled for the study. The respondents were chosen at random and issued with the questionnaire. The pre-testing helped to correct ambiguity, wrong wording and unrealistic questions. As has been noted by Ary et al. (2010), pre-testing aims at identifying and eliminating potential problems. Malhotra and Birks (2012) further stressed that pre-testing assists the researcher to improve upon the questionnaire in terms of wording, structure, format and organisation.

The quality of the information collected will be distorted if the questionnaire is faulty. The pre-tests also aided in determining the reliability of the instrument. The Cronbach alpha reliability coefficient obtained from the questionnaire was between 0.801 and 0.869 and the result is presented in Table 2.

Table 2: *Cronbach Alpha Reliability Coefficient of the Questionnaire*

Sections of questionnaire	Number of items	Cronbach's Alpha
Background Information	1	0.851
Control Activities	2	0.801
Components of Internal Control	5	0.869
Firm Performance & Measurement	1	0.832

Source: Field data, Angtuongba, (2017)
Sample size (N) = 21

As indicated in Table 2, the reliability co-efficients of the four constructs: background information of the respondent, control activities, components of internal control, and firm performance and performance measurement were 0.851, 0.801, 0.869 and 0.832 respectively, which were deemed reliable (Creswell, 2014). According to Creswell (2014), scales with Cronbach's alpha co-efficient of 0.70 or more are considered reliable. Based on the recommendations made during the validation process, few modifications were made in the questionnaire in terms of items in the construct even though all the constructs scored the required Cronbach's alpha co-efficient of 0.70 after the pre-test study.

Data Collection Procedures

Data was collected by using a survey method with questionnaires which was hand-delivered to respondents at the offices and premises of the sampled CUs. This method was chosen because of its suitability. In addition, it was an inexpensive method and useful considering the literacy level of the respondents and their availability. Two months were used to collect the data for the study. The researcher visited the CUs every Monday and Wednesday morning (9:00am-2:30pm) to meet the respondents. This continued every morning to the afternoon until the end of the two months as scheduled. On average, the researcher gets ten (10) respondents each day.

Before the questionnaires were filled and collected, the participants were addressed by the researcher in which he appropriately informed the respondents of the purpose of the research and vividly explained the questionnaires to enable them provide the right information needed to arrive at the objectives of the study. They were given ample time to complete the questionnaire. This procedure was appropriate since it was easier for the workers to complete the questionnaire and return it to the researcher without any shove.

Data Processing Tool and Data Analysis Techniques

Primary data from the field was edited to eliminate errors that may have been made by respondents. Coding was done to translate question responses into specific categories. Coding was done to organize and reduce research data into manageable summaries. Quantitative data was analysed using descriptive statistics. Statistical Package for Social Sciences (SPSS), version 25, was used to process the data. Descriptive statistics such as frequencies, mean, standard deviations and percentages were used to describe the data while inferential statistics referred to as Chi Square, regression and correlation were used to check the relationship between dependent and independent variables. The analysed data was presented in form of tables, pie-charts and bar-graphs where applicable.

Specifically, descriptive statistics such as frequency tables and percentages were used to present the issues relating to internal control, internal control practices and performance measurement. Kendall's coefficient of concordance (W) analysis was used to rank the items identified as challenges faced by the CUs with regards to internal control and internal control practices. The degree of agreement of the rankings by the respondents was then measured. W ranges from 0 to 1. In deriving W, let T, represent the sum of ranks for each constraint being ranked and where *Var* denotes variance and *n* denotes the number of constraints. The variance of the sum of ranks is given by:

$$Var_T = \frac{\sum T^2 - \frac{(\sum T)^2}{n}}{n} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

The maximum variance of *T* is given by:

$$m^2 \times \frac{(n^2-1)}{12} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

where *m* is the number of respondents.

The formula for Kendall's coefficient of concordance *W* is given by:

$$w = \frac{\sum T - \frac{(\sum T)^2}{n}}{m^2 \times \frac{(n^2-1)}{12}} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3)$$

By simplifying equation (3) will result in the computational formula for *W* as:

$$w = \frac{12\left[\sum T^2 - \frac{(\sum T)^2}{n}\right]}{mn^2(n^2-1)} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (4)$$

Following the agency theory, reasonable assurance concept and random utility theory, the respondents are assumed to optimise their utility for their responses on behalf of the CUs they represented. As a result, the effect of internal controls on the performance of CUs can be explained by the responses gathered from the respondents.

Chapter Summary

This chapter presented the research methods employed to help arrive at the objectives of this study. It examined the research design, the research approach, the study area, sample and sampling procedures, data collection instruments, method for data collection, data processing tools and data analytical framework, and their justifications. The study used a quantitative research approach and employed the descriptive research design as it seeks to describe the effects of internal control on the performance of co-operative credit unions in the Brong Ahafo region of Ghana. For the fact that this study employed the quantitative approach, questionnaires were used to solicit primary data from the field after which the data were entered into Structural Equation Model (SEM) for analysis.

It is important to mention that the study used eight (8) out of the 35 co-operative credit unions within the Brong Ahafo region of Ghana. Again, obtaining information from the respondents was interrupted by the busy working environments and the fear of disclosure of sensitive or unauthorized information. Despite this challenge, the reliability of the instrument was not affected.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

Introduction

This study assesses the effect internal controls on the performance of co-operative credit unions in the Brong Ahafo region of Ghana. The study employed the quantitative research approach and descriptive research design to arrive at the objectives. This chapter presents the results and discussion of the findings. Structured questionnaire was designed and used to gather the data for the study. The discussion includes the interpretation of the findings in reference to previous findings or studies, concepts and theory. The results are presented according to the specific objectives of the study. The first part of the chapter deals with the background characteristics (area of work or department) of the respondents while the second part is devoted to responses given by the respondents in accordance with the research objectives. Both descriptive and inferential statistics were employed in the data analysis. It is important to note that at the end of data collection, all the 167 respondents sampled participated in the study.

Position or Rank of Respondents

The various positions held by respondents in their various Co-operative credit unions were presented on Table 3 in which; 25 respondents representing 15.0% of the total number of respondents were Mobile Bankers; 14 respondents representing 8% of the total number of respondents were Tellers; 8 respondents representing 5% of the total number of respondents were Managers; 25 respondents representing 15% of the total number of respondents were Loan Officers; 17 respondents representing 10% of the total number of respondents were Operations Managers and 12 respondents representing 7% of the total number of respondents were Secretaries.

Table 3: *Position of the Respondents*

Position	Frequency	Percentage (%)
Accounts officer	32	19
Internal auditor	16	10
IT Officer	18	11
Loan officer	25	15
Manager	8	5
Mobile banker	25	15
Operations manager	17	10
Secretary	12	7
Teller	14	8
Total	167	100

Source: Field data, Angtuongba, (2017)

Also, 18 respondents representing 11% were IT Officers, and 16 respondents representing 10% were Internal Auditors. As indicated in Table 3, respondents were selected from the sensitive areas of the various co-operatives credit unions involving in different roles thought to be very critical in providing information towards the achievement of the objectives of this study. Every single role stated definitely adheres or needs to adhere to some form of internal controls.

Effectiveness of the Control Activities used by the selected Co-operative Credit Unions

To access the effectiveness of the control activities used by the selected CUs in this study, the study presented well-structured control activities to the respondents to indicate their presence within their organisations. The results were later used to examine the effectiveness of the control activities by regressing the control activities used by the organisation with the performance of the organisations. The result on the control activities is presented in Table 4.

Table 4: Control Activities Used by the Selected Co-operative Credit Unions

Variable	Frequency	Percentage
Clear information and communication channels	164	98
Suggestion boxes and feedback support systems	165	99
Segregation of duties	143	86
Effective policies and procedures	139	83
Control over access to resources and records	161	96
Reviewing of operating performance	137	82
Effective supervision	135	81
Review of operations and activities	133	80
Total	**1177**	**705**

Source: Field data, Angtuongba, (2017)

The variables under the control activities were presented to the respondents as a multiple response variable allowing the respondents to pick multiple answers or option, hence the multiple response analysis was used to analyse this variable. The analysis revealed that 164 out of the total sample of 167, representing 98% of responses stated that they have established clear information and communication channels, 165 out of the total sample of 167, representing 99% of responses stated suggestion boxes and feedback support systems, 143 out of the total sample of 167, representing 86% of responses indicated that there is clear segregation of duties, 139 out of the total sample of 167, representing 83% of responses indicated that there is effective policies and procedures in place, guiding the organisational activities whiles 161, 137, 135 and 133 respondents out of the total 167 sampled stated that there is control over access to resources and records, review of operating performance, effective supervision and review of operations and activities respectively in the selected

CUs as the control activities, representing 96%, 82%, 81%, and 80% of the total responses respectively.

Regression Analysis of the Effects of Control Activities on Performance

The study conducted a regression analysis to determine the effect of internal control activities on the performance. Table 5 presents results of the regression analysis. From the Table 5, there is a positive linear relationship between internal control activities and performance of the selected CUs used in this study.

Table 5: Regression Analysis of the Effect of Control Activities on Performance

Independent Variable	Odd Ratio	Z-Statistics	P-Value
Control activities of CUs	0.437**	0.569	0.097
Diagnostics			
R	0.437		
R^2	0.205		
Adjusted R^2	0.203		
Chi^2	81.69		
Standard Error	5.069		
Number of Observations	**167**		

Source: Field data, Angtuongba, (2017)

Note: Dependent variable is Performance, *** denotes significant at 1%, ** represents significant at 5% and * represents significant at 10%.

As presented in the Table 5, the coefficient of determination (R^2) is 0.205 and (R) is 0.437 at 0.05 significance level. The coefficient of determination indicates that (20.3%) of the variation in performance of the CUs is influenced by the control activities they are using or practicing. This implies that control activities have significant effects on performance of the CUs.

Effects of Internal Control on the Performance of Co-operative Credit Unions

The study sought to establish relevant statistics including the mean, standard deviation and odd ratios from regression to explain effects of internal control on performance of co-operative credit unions. This section therefore, presents the descriptive and inferential statistics on findings to determine the effect of internal controls on performance of Co-operative Credit Unions in the Brong Ahafo region of Ghana. The study used mean and standard deviation as the descriptive statistics. Mean and standard deviation coefficients are used when the distribution is normal while median and skewness coefficients are used when the distribution is skew (White, 2015).

According to White (2015), in a normal distribution the mean and the median are approximately the same. The skewness values must have a threshold of -0.5 to 0.5. The skewness values of the distribution were closer to each other and were within an acceptable threshold of a normal distribution (they were within a range of -0.40 to 0.42). The standard deviations were also moderate and closer to each other, indicating the non-dispersion in a widely-spread distribution. The moderateness of the standard deviations of the distribution shows that the views of the respondents were coming from a moderate homogeneous group, that is, a group with similar characteristics or similar understanding with regard to the issues under consideration.

The rationale for the second specific objective of the study was to find out the views of respondents on the effects of internal control on the performance of the selected CUs. The views of the respondents were described using means and standard deviations since the distribution was normal. This is presented in Table 6. Responses to the structured questionnaire used in eliciting data on the issues regarding the concepts were measured on a five-point unilinear scale ranging from one to five where one represented the strongest disagreement to the issues while five represented the strongest agreement to the issues. Based on the recommendation of Saunders et al. (2014), the study adopted mathematical approximation techniques to interpret the mean scores. Thus, Strongly Agree (4.5 – 5.0), Agree (3.5-4.4), Neutral (2.5 – 3.4), Disagree (1.5 – 2.4), and Strongly Disagree (1.0 – 1.4).

Table 6: Descriptive Statistics on the Effects of Internal control on the Performance of CUs

Variable	Observation	Mean	Standard Deviation
Performance	167	4.776	0.689
Control Environment	167	3.732	0.737
Assessment of Risk	167	4.839	0.881
Control Activities	167	4.660	0.754
Information and Communication	167	4.091	0.828
Monitoring and Evaluation	167	4.560	0.903
Preventive Control	167	4.301	0.926
Directive Control	167	4.183	0.838
Detective Control	167	3.586	0.816
Compensating Control	167	*3.931*	*0.717*
Corrective Control	167	3.513	0.834

Source: Field data, Angtuongba, (2017)

Mean for Performance, Control environment, Risk assessment, Control activities, information and communication, and Monitoring and evaluation were found to be 4.776, 3.732, 4.839, 4.660, 4.091 and 4.560 respectively and of standard deviations 0.689, 0.737, 0.881, 0.754, 0.828 and 0.903 respectively as per Table 6. The rest of the variables (types of internal control), preventive control, directive control, detective control, compensating control, and corrective control had mean of 4.301, 4.183, 3.586, 3.931, and 3.513 respectively, with standard deviation of 0.926, 0.838, 0.816, 0.717 and 0.834.

Table 7: Regression Analysis of the Effects of Internal Control on Performance of Co-operative Credit Unions

Independent Variable	Odd Ratio	Z-Statistics	P-Values
Control Environment	1.699***	0.013	0.006
Assessment of Risk	1.137***	0.007	0.019
Control Activities	1.869**	0.018	0.017
Information and Communication	1.516**	0.011	0.000
Monitoring	1.791**	0.009	0.009
Preventive Control	1.109**	0.016	0.004
Directive Control	1.559**	0.012	0.022
Detective Control	1.693**	0.015	0.035
Compensating Control	1.379**	0.006	0.008
Corrective Control	1.489**	0.005	0.033
Diagnostics			
LR $Chi^2(167)$	83.08		
Pro>Chi^2	0.000		
Log likelihood	369.783		
Pseudo R^2	0.818		
Number of Observations	167		

Source: Field data, Angtuongba, (2017)

From Table 7, it is evident that the estimation is significant at 5% indicating that the logistic regression model was significant and a Pseudo R^2 of 0.818 and a LR Chi^2 (167) of 83.08 shows that the independent variables used are good predictors of the dependent variable. The results indicate that, all the independent variables were found to have a significant relationship with the probability of affecting the performance of CUs. The results also show that all the variable have huge odds ratios indicating the margin of effects on the performance of the co-operative credit unions. Control activities have the highest odd ratio to affect the performance of co-operative credit unions while preventive control has the lowest. Interestingly, the odd ratio for all the variables were greater than one. This indicated the significance of the effects of internal control on the performance of CUs.

Challenges Encountered in Practicing Internal Control amongst the selected Co-operative Credit Unions

Based on the literature review, the study identified eight main limitations or challenges that confront CUs when practicing internal control. These are judgement, breakdowns, management overrides, collusions, design flaws, poor implementation, poor responses to reported anomalies and personal errors or mistakes. The respondents were asked to rank these limitations or challenges and the result of the ranking is presented in Table 8. The F-tests for degree of agreement or concordance (W) between the rankings of the challenges or limitations with regards to internal control by the respondents is 80.79% which is fairly high. The study revealed that the most important challenge or limitation faced by the respondents with regards to internal control is poor response to reported anomalies followed by management override, poor implementation, judgement and collusion.

Table 8: Challenges or Limitations of Internal Control in Co-operative Credit Unions

Challenges Identified (Limitations)	**Ranking**
Poor responses to reported anomalies	1
Management override	2
Poor implementation	3
Judgement	4
Collusion	5
Design flaws	
Breakdown	
Personal errors or mistakes	
Total observations	167
Coefficient of Concordance (W)	80.79%

Source: Field data, Angtuongba, (2017)

Discussions of Results

Results on Effects of Control Activities on the Performance of Co-operative Credit Unions

In this study, control activities were found to be significantly correlated to the performance of co-operative credit unions. The study`s finding corroborates with COSO (2013) that outlines control environment factors to include the way management assigns, communicates authority and responsibility, and organizes and develops its people; and the attention and direction provided by the board of directors. The result confirms that credit unions in Brong Ahafo have well defined channels of information and communication, an indication of good internal control systems. The result also agrees with the finding by Ray and Pany (2001) that asserts that control activities are another component of internal controls and that control activities are policies and procedures that help ensure that management directives are carried out.

The results further agree with the finding of Tunji (2013) and Dhillon (2001) who argued that internal controls include specific set of policies, procedures and rules an organization implements to provide dependable assurance that there is reliable financial reports, effective and efficient operations and activities comply with applicable laws and regulations. The results also concur with the finding of Anduuru (2005) that control activities involve two elements: information communication channels and procedures to effect the policies. Policies of organisations must be implemented conscientiously, thoughtfully and consistently to achieve the desired objectives.

Results on the Effects of Internal Control on the Performance of Co-operative Credit Unions

The results found a positive relationship between all internal control components and the types of internal control used by the sampled CUs. This indicates that internal controls have direct on the performance of Co-operative Credit Unions in the Brong Ahafo region of Ghana, there are good levels of internal control practices across the various levels or areas of the structures of the sampled CUs. This result is in line with the findings of Morteza, Parviz and Shima (2015) who concluded that existence of system of internal control influences performance positively and an internal control system seems to be necessary for effective performance. Similar views were echoed by Mwakimasinde, Odhiambo and Byaruhanga (2014) when their study revealed a positive significant effect of internal control system on the financial performance of deposit taking savings and loan companies. Also, Nyakundi, Nyamita and Tinega (2014) established that systems of internal control significantly influence performance in financial perspective.

The result of the study is also in agreement with the views of Agrawal and Knoeber (1996), who stated that the design and implementation of Internal Control is an effort to improve business performance. This means that if the CUs take internal control seriously, it will go a long way to improve their general performance level. Still on that, Walsh and Seward (1990) disclosed that, the performance of a company depends on the efficiency of internal control mechanisms and corporate extern.

The results of the study also corroborate with the positions of Dineshkumar et al., (2013) when they found that there is a strong relationship between internal control system and organizational performance of the Sri Lanka Telecom limited. And also, they noted that, internal control of the Sri Lanka Telecom limited will lead to high organizational performance in the future if they maintained the effectives. Similarly, Supriadi et al., (2014), Azlina and Amelia (2015), Triadi and Suputra (2016), Rismawan and Amilin (2016), Oppong et al. (2016) and Kinyua et al. (2015), all found same results and recommended that internal control should be enhanced to further improve the performance of companies.

However, the study rejects the findings of Prasetyo and Nurul (2007) who stated that internal control has positive but not significant effect on performance.

Specifically, results on the control environment showed a very encouraging pattern. Control environment had a mean and standard deviation of 3.732 and 0.737 respectively, and an odd ratio of 1.699 with performance at a p-value of 0.006. This indicate that authority, responsibilities, policies and other elements of the control environment are in place and clearly defined and practiced. This result collaborates the assertion by Daft (2004) that organizational structure defines how job tasks are formally divided, grouped and coordinated. There are six elements that managers of agencies need to address when they design their organization's structure. These are: work specialization, departmentalization, chain of command, span of control, centralization, decentralization and formalization. An organization's structure is a means to help management of companies achieve its objectives (Daft, 2004). The results confirm that employees of credit unions in the Brong Ahafo region have clear assignment of responsibility and delegation of authority, an impressive indication of existence of good internal control environment.

Also, for the fact that there is clear assignment of roles, responsibilities and the delegation of duties, it can be inferred that workers or personnel including key managers possess adequate knowledge and experience to discharge their responsibilities, and that, policies are put in place concerning internal control practices in the CUs. The results concur with the findings by Boxall and Purcell (2003) that human resource advantage can be traced to better people employed in an organization. It also corroborates the finding by Becker, Huselid, Pickus and Spratt (1997) that performance can be achieved with the help of high-performance work system which takes into account the factors affecting, individual performance such as recruitment procedures, motivation, training and management development. People are able to perform tasks if they have the right skills required for the job. The results also agree with International Standards for the Professional Practice of Internal Auditing

(Standards) that defines control environment as: the actions and attitude of management and the board concerning the importance of control within the organization. The control environment therefore provides a structure and discipline for the attainment of the primary objectives of the system of internal control. The results confirm that most credit unions in the Brong Ahafo region have good human resource policies and practices which are clear symbols of the existence of good internal control environment.

Results on the Challenges or Limitations of Internal Control to the Co-operative Credit Unions

The study also examined the challenges or limitations of internal control to the co-operative credit unions. As described earlier, the study assessed the challenges and found poor responses to reported anomalies as the most worrying limitation the CUs face with regards to internal control. A failure to act on reported anomalies would render the internal control system of the organization ineffective and inefficient. Pridgen, (2007) found similar result in his study and advised that caution should be taken to avoid the raising of anomalies which are false and when such becomes frequent, they may lead to ignoring true anomalies. Williams, (2000) also noted that the internal control system of an organization is a true reflection of the effective and efficient of its personnel who implement them and ensure that they are functioning properly. This means that, personal error or mistake is also a challenge to effective internal control system as found in this study. Similarly, Lannoye (1999) also opined that effective internal control may be limited by the realities of human judgment within the organisation. The results of this study echoed the views of Lannoye (1999) as it identified judgement as one of the limitations of effective internal control of the CUs. In furtherance, the results also buttress the findings of Asante, (2011), where he noted that careless adoption of internal control systems without proper scrutiny amounting to design error is one of the major challenges facing internal control implementation.

Chapter Summary

The chapter began by presenting a descriptive analysis of the respondents` professional profile or position held at work. The descriptive analysis revealed that the majority of the respondents were in management positions of their respective credit unions.

After that, the chapter presented further descriptive analysis of the variables used in the study under the objectives guiding this study. These descriptive analyses were on the control activities, and the effects of internal control on performance of credit unions.

The chapter also discussed the challenges or limitations of the internal control on the performance of the credit unions. The discussions revealed that the key challenge is poor responses to reported anomalies. The study finally employed the Logistic Regression Model to estimate the baseline model to ensure the robustness of the analysis and discussions presented in this chapter.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Introduction

Co-operative credit unions play a vital role in every economy of any nation more especially the developing ones. Among the rural folks, CUs remain one of the oldest economic units that safeguard and make funds available to economic agents in the economy. However, many of these credit unions are still finding it hard to survive, achieve their stated goals and compete with other well-established firms despite their contribution to an economy as a whole. As such, an effective internal control in these co-operative credit unions has been cited in the literature to have the potential of promoting the performance of the CUs and ensure its achievement of objectives and goals, which is creation of more profits, customer satisfaction, survival and growth.

Generally, internal controls are quite crucial for every organisation as it has the potential to influence goodwill, governance, survival, growth and profitability of every firm. It is on this hypothesis that this study examined the effects of internal control on the performance of co-operative credit unions in the Brong Ahafo region of Ghana. The study also examined the challenges that these co-operative credit unions face in using internal control, and the relationship between control activities and the performance of the credit unions.

This chapter presents the major finding obtained from the analysis of the topic under study. The chapter also presents a summary of the findings, conclusions and recommendations as well as suggestions for further research.

Summary of the Research

The main purpose of the study was to assess the effects of internal control on the performance of co-operative credit unions in the Brong Ahafo region of Ghana. Literature suggested the numerous means through which or several factors that could influence the effectiveness of internal control on the performance of co-operative credit unions. Of course, several aspects of internal control that influence the performance of co-operative credit unions were identified, just to mention but few are the works by Ebowessuman, (2016), Mwakimasinde, Odhiambo and Byaruhanga (2014), Haat (2012), Morteza, Parviz and Shima (2015), and Kamau, (2016) who assessed the effects of internal control on the performance of co-operative credit unions.

The literature review provided supporting theories as well as empirical justification on the effects of internal control on the performance of co-operative credit unions. Specifically, the agency theory, the system theory, the theory of the firm and the contingency theory were examined since the study is based on management roles, firm performance, measurement and general conduct of a business organisation. The empirical review noted that there is inconclusiveness of findings on the effects of internal control on the performance of co-operative credit unions. This is because, many, if not all, of the past studies concentrated on the financial performance of the co-operative credit unions. This study however interacted the internal control components and practices or types with the performance of the firm, measuring performance using several proxies as indicated in the preceding chapters, to hypothesize that internal control has effect on or influence the performance of co-operative credit unions.

This study employed the quantitative research approach and used the descriptive research design to estimate the model used in the study. Furthermore, the study used only eight (8) out of the 35 co-operative credit unions available at the time that this study is being conducted, from which a total sample of 167 respondents were calculated and used, using the Yamane`s (1967) sample formula. In addition, the study developed one baseline conceptual model. The model specification sought to establish the effect of internal control on the performance of co-operative credit unions. The study employed the Logistic Regression Model to estimate the model.

Summary of Findings

The study produced several astute and significant results that have great implications for the financial sector of the economy, especially co-operative credit unions, economists, consultants and policy makers across the country. In the current study, it was found that the major challenge or limitation to internal control is poor response to anomalies reported. Also, implementation of controls was found to be a challenge in the sampled CUs. However, greater proportion of the selected co-operative credit unions has good internal control systems in place and personnel or workers have the necessary skills and attitude to maintain the systems of internal control. In addition, internal control practices have been found to be available at all levels of the organisational management hierarchy.

Further findings revealed that indeed internal control have significant effect on the performance of the co-operative credit unions in the Brong Ahafo region of Ghana, and, control activities, monitoring, control environment and information and communication have been found to have more effects on performance than the rest of the internal control components even though, all of the components have been found to have effect on performance of the CUs. Even so, suggestion boxes and feedback support systems, clear information and communication channels, and segregation of duties have been found to be the commonest control activities used by the sampled co-operative credit unions in the Brong Ahafo region of Ghana. This is an indication that co-operative credit unions in the Brong Ahafo region have structured control environment which included the presence of policies that guided work process and roles and responsibilities that highlights each employee's role and responsibility which has a positive effect on performance since employees work in line of their duties under a control policy and practice which promotes effective delivery of employee performance and thus a positive result in the performance. Also, the presence of feedback support systems and suggestion boxes means that the CUs seek and use the views of stakeholders in decision making.

Finally, the study found that, all the co-operative credit unions have all key departments or areas such as operation, information and technology (IT), mobile banking, internal audit, loan, teller, among others.

Conclusions

Based on the objectives of this study and in line with the main findings, the following conclusions were made. The findings of the study found a significant positive relationship between internal control components and mechanisms, and performance of co-operative credit unions in the Brong Ahafo region. The study thus concludes that there is internal control have significant positive effects on the performance of co-operative credit unions in the Brong Ahafo region.

The study also concludes that the very main challenges that confront co-operative credit unions in making effective use of internal control are poor responses to reported anomalies, management override, poor implementation, judgement, collusion, design flaws, breakdown and personal errors or mistakes.

Confirming the argument of the findings of this study concludes that internal control systems are one significant area credit unions should give attention to in order to enhance their performance. Furthermore, it can be concluded that effective internal control systems have positive effects on performance of co-operative credit unions. Hence, credit unions have to invest in establishing and maintaining strong internal control systems to realize better performance attainment. From the above conclusion, it will be prudent for management of the CUs to focus on key aspects of internal control environment and activities that could result in improved performance. Risk assessment, monitoring, information and communication and control environment plays a significant role in performance and hence managers of credit unions should entrench those mechanisms to better or boost the performances of their unions. From the above conclusion, strong internal control systems must be rooted in all levels of the CUs by the managers to augment the performance of the CUs.

Recommendations

Based on the objectives of this study in line with the main findings and the conclusions, the following recommendations are made for actions to be taken: The management of credit unions should identify effective and efficient implement internal control systems that match their business` needs and invest in them appropriately to enhance the performance of the CUs.

Also, it is recommended that the co-operative credit unions embrace and invest significantly in risk assessment and management to maximize the benefits of internal control systems.

Finally, it is also recommended that the credit unions ensure that their organizations have strong internal control environment where internal control activities in form of policies and procedures are adequate to enhance performance of the CUs. The control environment and control activities should on a regular basis be evaluated by internal audit department to provide management with the assurance on the adequacy and effectiveness of mitigation controls that management has put in place to maintain, sustain and enhance the effective and efficiency of the internal control mechanisms to boost performance.

Suggestion for Further Research

The following related areas can be researched on to add up to the knowledge of what this study has achieved. First, there is the need to carry out a comparative evaluation or a study to analyse the factors that influence adoption of internal control practices by co-operative credit unions in the Brong Ahafo region or Ghana as a whole. Also, it might be useful to study the impact of the rapid growth of technology on the choice and use of internal control practices and mechanisms by co-operative credit union in Ghana. This will help reveal the performance of the individual co-operative credit unions in the presence of technology and how these technologies influence the firms` performance and, choice and use of internal control practices and mechanisms. Lastly, further research should be carried out to examine the influence of the banking sector re-organisation on performance of co-operative credit unions using content analysis. Also, it will be prudent to conduct a further study to examine the effects of the influx of Ponzi schemes and microfinance firm on the performance of the co-operative credit unions in Ghana.

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APPENDIX A
QUESTIONNAIRE

Hello Respondent,

The aim of this questionnaire is to obtain data on the effects of internal control on the performance of Co-operative Credit Unions in the Brong Ahafo Region of Ghana. This study is for academic purposes and any information provided will be used for academic purposes and will be treated confidential. Your support and cooperation are highly appreciated.

SECTION A: Background of Respondents

1. Kindly indicate your position in the organisation
   - Accounts officer
   - Internal auditor
   - IT Officer
   - Loan officer
   - Manager
   - Mobile banker
   - Operations manager
   - Secretary
   - Teller

SECTION B: Control Activities used in the Organisation

This section seeks to gather data on the various control activities used by the various Co-operative Credit Unions under study. Kindly indicate those activities present in your organisation by ticking the space provided. Tick (√) all that applies.

1. **Control Activities**

Control Activities Present in my Organisation	Tick Here
Clear information and communication channels	
Suggestion boxes and feedback support systems	
Segregation of duties	
Effective policies and procedures	
Control over access to resources and records	
Reviewing of operating performance	
Effective supervision	
Review of operations and activities	

2. Types of Controls

Types of Control in my Organisation	Tick Here
Preventive Control	
Directive Control	
Detective Control	
Compensating Control	
Corrective Control	

SECTION: Components of Internal Control

This section is the knowledge-based view of the study. It seeks to gather information on the various components of the internal control system available in the organisations. Kindly use the Five-Likert Scale provided to answer the question at this section. Likert scale: 1-Strongly Disagree 2- Disagree 3 – Neutral 4- Agree 5- Strongly Agree.

1. Control Environment

Control Environment Issues	1	2	3	4	5
Control environment reflect the attitude and the policies of management and it's an important auditing function					
Control Environment set the tone of an organization and influence the control consciousness of its people					
Control Environment affect the entire organization and all other elements of internal controls					
Control Environment assist toward reducing the level fraudulent activities within organizational operation					
The quality of an entity's internal controls system depends on the function and quality of their control environment					

2. **Assessment of Risk**

Risk Assessment Issues	1	2	3	4	5
Assessment of risk involves the identification and analysis of relevant risks facing the business					
The assessment of risk determines any situation that may pose legal or financial risk to the firm					
Assessment of risk helps to maintain business risks within determined the required risk level					
Assessment of risk integrate professional judgment about probable adverse conditions and the likelihood of possible losses					
Assessment of risk help the management to form a basis of the risks facing the business to be managed					

3. **Control Activity Issues**

Control Activity Issues	1	2	3	4	5
Control activities entail the policies and procedures that ensure management directives are carried out properly					
Control activities ensure that necessary actions are taken to address risks to achievement of the entity's objectives					
Control activities describe the policies, procedures and best practices a small business can put in place to minimize risk					
Control activities help to address risks to achieve business Objectives					
Control activities should be implemented thoughtfully, conscientiously, and consistently for them to be useful					

4. **Communication and Information**

Communication and Information Issues	1	2	3	4	5
Communication and Information-systems enable people in the organization to carry out their responsibilities					
Information is the vehicle by which control policies, procedures are introduced and reinforced					
Communication enables employees to become aware of management's commitment to internal controls					
Reliable and Relevant information from both internal and external sources should be communicated to everyone in the organization					
Information should be communicated throughout the entire organization to permit personnel or workers to carry out their responsibilities					

5. **Monitoring and Evaluation**

Monitoring and Evaluation Issues	1	2	3	4	5
Monitoring is accomplished by ongoing monitoring activities and by separate evaluations of internal controls					
Monitoring describes a small business' practices of self-auditing its risk management systems					
Monitoring help in ensuring that all employees are contended with the internal policies of the business					
Monitoring determines whether internal control is adequately designed, properly executed and effective					
Monitoring provides assurance that the findings of audits and other reviews are promptly determined					

SECTION D: Performance and Performance Measurement

This section looks at the performance and performance measurement issues in the organisation. Kindly use the Five-Likert Scale provided to answer the question at this section. Likert scale: 1-Strongly Disagree 2- Disagree 3 – Neutral 4- Agree 5- Strongly Agree.

Effects of Internal Control on Performance	1	2	3	4	5
Performances of employees are reviewed at scheduled periods					
Performance of supervisors and managers are reviewed and appraised appropriately at scheduled periods					
Budgets are drawn, vetted and approved					
Internal control has effects on the performance of the firm					
Performance of my organisation is measured using indicators from all key aspects of the firm rather than concentrating on financial statements					
Customer satisfaction, employee turnover, customer growth, productivity and satisfaction of workers are some indicators of performance aside the financials.					
Financial reports are prepared in accordance to lay down statutory procedures.					
Our organization has an accounting and financial management system					
Management is committed to the operation of the system					
Management acts with a great degree of integrity in execution of their roles					

End of Survey

Thank you