

**EFFECTS OF INTERNAL CONTROL SYSTEMS ON RISK MANAGEMENT  
IN COMMERCIAL BANKS IN NAKURU TOWN**

**M E E R A , B I M A L R O Y S H A H**

**A Research Project Submitted to the School of Business and Economics in  
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**DECLARATION AND RECOMMENDATION**

**Declaration**

This project is my original work and has not been submitted for any examination or award in any university or academic institutions.

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**Recommendation**

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## **D E D I C A T I O N**

This work is dedicated to my parents, Bimal Roy Shah and Darshna Bimal Roy Shah for their invaluable love, support and encouragement during the study period.

## **A C K N O W L E D G E M E N T S**

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## ABSTRACT

Frequent reports of frauds in the financial sector in Kenya especially within the Banking sector have been reported over the last several years (2008-2014). In the second quarter of 2010, out of 102 corporate fraud cases reported in Kenya, all were associated with inadequate risk control measures by commercial banks. Exposure to such risks affect not only their bottom lines, but also leads to substantial reduction in resources, severe disruptions to the flow of information and communication, loss of records among others. The purpose of the study therefore sought to investigate the effects of internal control systems on risk management in commercial banks in Nakuru. The specific objectives were: to assess the effect of internal control components on the risk management of commercial banks, to assess the effect of internal control measures on risk management of commercial banks, and to investigate the effect of internal control procedures on risk management of commercial banks. The study adopted a descriptive survey design. The target population comprised of 28 Commercial Banks in Nakuru Town. A census was employed and two respondents per bank (one from credit and one from operations department) were purposively selected thus totaling to 56 respondents. Data were collected using structured questionnaires. Data were analyzed using descriptive analysis by use of Chi square while Correlation analysis and multiple regression were used for inferential statistics. The results of the study showed that internal control components ( $r = .720, \alpha = 0.01$ ), internal control measure ( $r = .743, \alpha = 0.01$ ), and internal control procedure ( $r = .701, \alpha = 0.01$ ) were positively and significantly correlated to risk management. Multiple regression analysis showed that internal control components ( $\beta = 0.485$ ), internal control measure ( $\beta = 0.189$ ), and internal control procedure ( $\beta = 0.086$ ) when regressed against Banks risk management in Nakuru Town. Adjusted  $r^2$  was 0.87 implying that the regression model can explain 87% of the variability. The study concludes that banking institutions should strive for tighter internal control systems on mitigating risks through components, measures and procedures. It is recommended that attention be given to the strong influences on the internal control systems of commercial banks while strategic objectives and risk management policy of the company be determined at the highest level in the organization and senior management be responsible for the policies to be incorporated into daily operations and to dedicate the necessary resources to achieve this. Further studies should be attempted in assessing the risk management and internal control systems in microfinances institutions'.

**Key Words:** *Internal Control Systems, Internal Control Environment, Internal Control Components, Risk Management, Commercial Banks, ICP*

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## LIST OF ABBREVIATIONS AND ACRONYMS

<b>5 P's</b>	: People, Purpose, Payment, Protection and Prospective.
<b>5 C's</b>	: Comprehensive, Credit Assessment, Capacity, Capital, Collateral
<b>AICPA</b>	: The American Institute of Certified Public Accountants
<b>AIRMIC</b>	: The Association of Insurance and Risk Managers
<b>ALARM</b>	: The National Forum for Risk Management in the Public Sector
<b>ALCO</b>	: Group's Asset and Liability Committee
<b>BRSB</b>	: The Banking Regulation and Supervision Board
<b>CAMPARI</b>	: Character, Ability, Margin, Purpose, Amount, Repayment terms and Insurance
<b>CIMA</b>	: Chartered Institute of Management Accountants
<b>COSO</b>	: Committee Sponsoring Organizations, Treadway Commission
<b>EC</b>	: European Commission
<b>ICA</b>	: Institute of Chartered Accountants
<b>IIARF</b>	: Institute of Internal Auditors Research Foundation
<b>IFA</b>	: International Federation of Accountants
<b>IR</b>	: Investor Relations
<b>IRM</b>	: The Institute of Risk Management
<b>LAPP</b>	: Liquidity, Activity, Profitability, Potential
<b>LTFU</b>	: Long Term Funding Unit
<b>RBICR</b>	: Regulation on Banks' Internal Control, Risk Management Systems
<b>SAS</b>	: Statement on Auditing Standards

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

Banks world over are currently faced with far greater challenges than ever before due to economical, technological and legal interdependences which have become more pronounced (Holt, 2006). Therefore, every financial institution is expected to put in place strong risk management structures which out of necessity will require stable and strong internal control systems to help achieve set organizational goals. The aim of every profit-making organization is to earn profit, ensure sustainable business continuity, meet stakeholder demands/expectations, honour their obligations as and when they fall due (Berglund, 2002). Objectives can be easily achieved if the owner and manager are the same person. However, as the business grows and expands, the need for additional employees arises and the owner employs more and more people to help manage the company. This gradually results to separation of ownership and control. At this point, the owners realize that precautions must be taken to protect the company as well as their interest.

Internal control system is considered not only an essential component of risk management but also an enhancer of organizational effectiveness and efficiency. Risks are inherent in every economic activity and every organization has to manage it according to its size and nature of operation in order to survive and grow (Waweru & Kalani, 2009). Issues arise with the separation of owners from professional management and the scaling of firms. Auditing and assurance to maintain checks and balances against any adverse outcomes (theft, mismanagement) are likely to reduce. Shareholder values increase through, accurate, reliable, and timely reporting on the affairs. The weaknesses of many companies' control systems have been reported resulting to big financial scandals of recent years and as a result, increased attention on risk management, internal controls, internal audit and their role in modern organizations (Berglund, 2002). The Sarbanes-Oxley Act, 2002 (SOX), was enacted following a number of serious financial scandals including Enron Corporation, Tyco International and WorldCom (Coates, 2002) that resulted from control weaknesses. Following these, greater demands were made on companies to account for these policies in their corporate governance statements, the strategic risk factors they are

exposed to and the internal control systems put in place to alleviate them (COSO, 2004).

In Kenya, a number of cases have been reported. In 2006, Charterhouse Bank a Kenyan indigenous investment bank was put under statutory management due to alleged money laundering activities at the bank. Trade Bank which was one of the most brilliant ideas in the local banking industry had expanded rapidly to become the ninth largest bank in Kenya, did not escape the curse of insider trading, which had become a key pest of the industry and was placed under liquidation in 1993 by Central Bank of Kenya. As a result, central bank appointed an expert committee with the combined tasks of proposing draft transposition measures for the implementation of directives, which is to assess, within the scope of preventing fraud and other financial malpractices, the need for and suitability of other measures (CBK, 2008).

Risk management is a process of understanding and managing the risks that entities are inevitably subject to in attempting to achieve their corporate objective (CIMA, 2005). For management purposes, risks are usually divided into categories such as operational, financial, legal compliance, information and personnel. Effective risk management involves risk assessment, risk evaluation, risk treatment and risk reporting. The focus of good risk management is the identification and treatment of these risks in accordance with the organization's risk appetite. These risks need to be managed and controlled in order to prevent vibrant organizations from catastrophic losses and help them achieve their goals and objectives (Holt, 2006).

Internal control on the other hand, is "the whole system of controls, established in order to provide reasonable assurance of, effective and efficient operation, internal financial control, compliance with laws and regulations" (CIMA, 2006). The formality, structure and nature of a company's system of internal control will generally vary with the type of sector or industry, size of the company and the level of public interest in it. Since profits are in essence the reward for successful risk-taking, the purpose of an internal control system is to help manage and control risk appropriately rather than to eliminate it as indicated in the Turnbull Report (ICAEW, 1999). Thus, control mechanisms should be incorporated into the business plan and embedded in the day-to-day activities of the company.

## **1.2 Statement of the Problem**

In the period 2007-2014, frequent reports of frauds in the financial sector especially in Banks have been reported (Business Daily, 2012). In the second quarter of 2010, all 102 fraud cases reported in Kenya, were associated with inadequate risk control measures by commercial banks (Technology Banker, 2012). Exposure to such risks affect not only the bottom line of these institutions, but also lead to substantial reductions in financial and other resources, severe disruptions to the flow of information and communication, loss of records among others (Holt, 2006). These manifestations in the banks imply that the internal control systems in place are either insufficient or are ineffective. It is not clear yet to what extent the internal control components; measures and procedures and environment may be responsible for the current scenario in the banking sector in Kenya. The study sought to investigate the effect of these variables on the management of the risks in the banks. The study sought to answer the question; how do the internal control systems effect risk management in the commercial banks in Nakuru Town?

## **1.3 Objectives of the Study**

### **1.3.1 General Objective**

The general objective of this study was to evaluate the effects of internal control systems on risk management in commercial banks.

### **1.3.2 Specific objectives**

The study was guided by the following objectives:

- i. To assess the effect of internal control components on the risk management of commercial banks
- ii. To evaluate the effect of internal control measures on risk management of commercial banks
- iii. To investigate the effect of internal control procedures on risk management of commercial banks

## **1.4 Research Hypotheses**

**H<sub>0</sub><sub>1</sub>:** Internal control components have no significant effect on risk management in commercial banks

**H 0<sub>2</sub>:** Internal control measures have no significant effect on risk management

**H 0<sub>3</sub>:** Internal control procedures have no significant effect on risk management

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

This study sought to investigate the importance of ICSs and how they can aid in mitigating risks that banks are faced with. The findings of this study may go a long way in forming the opinions and arguments fronted by banking practitioners. It also enables financial institutions and other organizations to gain knowledge and insight on the need to strengthen their ICSs, owing to their impact to their bottom lines. Regulatory organs, government and policy makers may also benefit from the study in pursuance of policies directed toward growth and regulation of the banking sector and in this regard; economic growth may be stimulated as the sector is at the backbone of virtually all economic activities within and without the country. Lastly, findings of this study may help in filling in a gap in the field of strategic management by adding on to the existing knowledge on ICSs and their impact on mitigating various risks facing financial intermediaries. Future scholars and academicians may also identify gaps from which they can use for further research works.

### **1.6 Scope of the Study**

This study was limited to the 28 Commercial Banks with operations in Nakuru town. The study was conducted within a period of three months i.e September 2015 to November 2015.

### **1.5 Operational Definition of Terms**

**Commercial Bank:** The Banking Act, Cap 488 defines a bank as a company, which carries on, or purposes to carry on banking business (CBK 2015). This study adopts the same meaning.

**Risk:** This term refers to the danger that a certain unpredictable contingency can occur, which generates randomness in cash flow (CIMA, 2006). The study adopts the same meaning and their variables were measured by Operational risk, Credit risk, Institutional risk.

**Internal control components:** These refer to the way management runs a business and are integrated with the management process. The components are: Control Environment, Risk Assessment, Monitoring, Information and Communication, Control Activities (Bonnie & Marcia, 2009). This study adopts the same meaning.

**Internal control measures:** This refers to the way Management performs checks to safeguard assets from time to time (COSO, 2004). This study adopts the same meaning and their variables will be measured by directive measures and preventive measures.

**Internal control procedures:** This term refers to the systems put in place to ensure the continued reliability of accounting systems (COSO, 2004). For the purpose of this study this term means all those mechanisms put in place to ensure accuracy and reliability of the accounting systems. Their variables were measured by the level of compliance, its reliability and effectiveness.

**Risk management:** This term refers to the identification, assessment, and prioritization of risks and their effects of uncertainty on organizational objectives, followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events or to maximize the realization of opportunities. Risk management's objective is to assure uncertainty does not deflect the endeavor from the business goals (Hubbard, 2009). The study adopted the same meaning and it measured the variable by assessing Operational risk, Credit risk, and Institutional risk elements of risk management.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter has two sections, the theoretical section documents pertinent theories and findings from previous work upon which the study will be anchored. It will explore concepts and theories of different dividend policy and determinant factors of dividend payout. And a strategic risk management part that will seek to show how firms manage strategic risk management using internal control system .

#### **2.2 Theoretical literature review**

This section deals with the theories proponent for the study .

##### **2.2.1 Stakeholder Theory**

Stakeholder theory, originally developed by Freeman (1984) as a managerial instrument and has since evolved into a theory of the firm with high explanatory potential. The most promising contribution to risk management is the extension of implicit contracts theory from employment to other contracts, including sales and financing (Cornell and Shapiro, 1987). In certain industries, particularly high-tech and services, consumer trust in the company to continue offering its services in the future can substantially contribute to company value. However, the value of these implicit claims is highly sensitive to expected costs of financial distress and bankruptcy. Since corporate risk management practices lead to a decrease in these expected costs, company value rises (Klimczak, 2005).

##### **2.2.2 Agency Theory**

Agency theory extends the analysis of the firm to include separation of ownership and control, and managerial motivation. In the field of corporate risk management, agency issues have been shown to influence managerial attitudes toward risk taking and hedging (Smith & Stulz, 1985). Theory also explains possible mismatch of interest between shareholders, management and debt holders due to asymmetries in earning distribution, which can result in the firm taking too much risk or not engaging in positive net value projects (Smith, 2006).

## **2.3 Empirical literature review**

### **2.3.1 Internal Control Components**

Internal controls refer to the measures instituted by an organization so as to ensure attainment of the entity's objectives, goals and missions (Brennan & Solomon, 2008). They are systems of policies and procedures that protect the assets of an organization, create reliable financial reporting, promote compliance with laws and regulations and achieve effective and efficient operations. These systems are not only related to accounting and reporting but also relate to the organizations communication processes, internally and externally, and include procedures for:- handling funds received and expended by the organization, preparing appropriate and timely financial reporting to board members and officers, conducting the annual audit of the organization's financial statements, maintaining inventory records of real and other properties and their whereabouts.

Internal Controls are processes designed and affected by those charged with governance, management, and other personnel to provide reasonable assurance about the achievement of an entity's objectives with regard to reliability of the financial reporting, effectiveness and efficiency of operations and compliance with applicable laws and regulations (David, 2001). Increasingly, reliability of financial reporting in accounting context is very important for the investors who use the information for decision management (Jenninget & Reckers, 2008).

The reliability of financial reporting is effective to internal control efficiency to ensure that the transactions and book keeping are appropriate and properly authorized, valid, correctly recorded, complete, and on time. Moreover, it is very important that organizations have fairly summarized accounting information data disclosure (Sebbowa, 2009). However, in general, a quality reporting is affected by internal control mechanism. There is a general perception that institution and enforcement of proper internal control systems will always lead to improved financial performance. It is also a general belief that properly instituted systems of internal control improve the reporting process and also give rise to reliable reports which enhances the accountability function of management of an entity. According to Dixon et al (1990), appropriate performance measures are those which enable organizations to direct their actions towards achieving their strategic objectives.

On the other hand Sebbowa (2009), refers to performance as the ability to operate efficiently, profitability, survive, grow and react to the environmental opportunities and threats. For purposes of the study I will adopt Ray and Kurt's definition of internal control systems. In as much as Internal Control Systems are wide and numerous, for the sake of this study, Internal control systems will be limited to; the Control Environment, Internal Audit, and Control activities whereas Financial performance will be looked at basically from the three perspectives of Liquidity, Accountability and Reporting (Donald & Delno, 2009).

Financial institutions, especially between 2007-2014, have seen heightened concerns and focus on risk management, as a result of business scandals and failures where tremendous losses were suffered. The Basel II Capital Accord and the revised Combined Code (2003) in the UK are governance reforms with the intent of minimizing the risk of future major corporate failures through tighter regulation of internal control systems. Strategic risk management is a corner stone of good corporate governance that results in better service delivery, more efficient and effective use of scarce resources and better project management (Collier, 2007).

According to Dorfman (2007), strategic risk management is the logical development and implementation of a plan to deal with potential losses. It is important for organizations to put in place risk management programs to manage exposures to risks, protect assets and prepare ahead of time on how to control financial losses before they occur (strategic risk management is a strategy of pre-loss planning for pre-loss resources).

Risk is the combination of the probability of an event and its consequences (IRM, 2002). Muner (2004), views risk as any uncertainty that affects a system in an unknown fashion whereby the ramifications are also unknown but bears with it great fluctuation in value and outcome while ICAEW (2009), argues that the impact/probability of risk allows an organization to determine which priority to give to each risk and how to manage them.

The problems that risk pose are very serious and not easily overcome especially when the risk involves things that people are deeply concerned about. This is where risk

management helps choose among alternative causes of actions to reduce the effects of risks. Risk management and internal controls are means by which businesses' opportunities are maximized and potential and material losses are reduced (Collier, 2007).

These are the key concepts fundamental to how companies and organizations manage risks, provide a basis for application across organizations, industries and sectors are made up of components. These focus directly on achievement of objectives established by a particular entity and provides a basis for defining enterprise risk management's effectiveness. Among the components are:

**Internal Environment:** The internal environment has to do with the tone of an organization, which sets the basis for how risk is viewed and addressed by an organization's personnel, including risk management philosophy, risk appetite, ethical values, integrity and the environment within which an organization operates.

**Objective Setting:** Before management can identify potential events that could affect the achievements of the organization, it must first set objectives for the firm. Enterprise risk management makes sure that management has put in place a process to set objectives and that the chosen objectives support and align with the entity's mission and are consistent with its risk appetite.

**Event Identification:** It is important that internal and external events capable of affecting the achievement of the organization's objectives are identified, distinguishing between risks and opportunities. Opportunities are channeled back to management's strategy or objective setting process.

**Risk Assessment:** Risk assessment is the determination of quantitative or qualitative value of risk related to a particular event if it happens. This involves analysis and evaluation. Quantitative risk analysis requires the calculation of two elements: the probability that the event will occur and the consequences of the event. It must therefore be analyzed, taking into consideration likelihood and impact, as a basis for determining how they should be managed. It is assessed on an inherent and a residual basis. Those risks that exist and affect the organization before they are addressed and managed are known as inherent risks, while those risks that remain after an organization attempted mitigating inherent risks are called residual risks.

**Risk Response:** This is where management needs to decide on which risks to avoid, accept, reduce or transfer and develop a set of actions to align risks with the entity's risk tolerance and risk appetite.

**Control activities:** Control activities such as operating review and reporting, authorization, verifications, approvals and division of duties should be implemented in order to try and avoid risks materializing.

**Information and communication:** Important and relevant information should be communicated in an appropriate and timely manner in order to enable employees to properly carry out their duties and responsibilities. The communication system should ensure that all information, positive and negative, reaches senior management without any delay.

**Monitoring:** The monitoring process involves assessing the quality of control systems over time. This may be accomplished through monitoring activities, separate evaluation or both.

#### **2.3.1.1 Control Environment**

Whittington and Pany (2001), note that the control environment sets the tone of the organization by influencing the control consciousness of people. They further assert that control environment is viewed as the foundation for all the other components of internal control. Control environment factors include; integrity and ethical values of personnel responsible for creating, administering, and monitoring the controls, commitment and competence of persons performing assigned duties, board of directors or audit committees (especially the extent of their independence from management, experience & stature), management philosophy and operating style (in terms of their aggressiveness or conservativeness which may determine the level of risk they may take on), and Organizational structure (which may be a well-organized structure that provides for proper planning, directing and controlling operations or a disorganized structure that may only serve to confuse the key players by creating unclear roles).

Control environment has several factors, however, for purposes of this research, the review will focus on Management philosophy and operating style, the integrity and ethical values of personnel that create and administer controls, audit committees and board of directors. For purposes of the study, board of directors will be represented by

the Board of Management and the various committees of the Board (Verschoor, 1999). Whittington & Pany (2001), also believe that these factors set a basis upon which the other internal control components can be built. They also provide a framework within which the other components operate. However, these assertions have not always held true, since management in organizations have always overridden these controls, and the lack of mentoring has always led to collapse of controls. The independence of audit committee has largely been theoretical in most organizations. Boards of management have on several occasions had very little time for institution affairs, implying that their supervisory role has always been wanting.

Internal control systems not only contribute to managerial effectiveness but are also important duties of corporate boards of directors. Accounting literature likewise emphasizes the importance of an organization's integrity and ethical values in maintaining an effective control system (Verschoor, 1999). A focus on integrity and ethical values was the principal contribution of Internal Control-Integrated Framework published by the Committee of Sponsoring Organizations of the Treadway Commission (on fraudulent financial reporting.)

To trigger independence of auditors, the American Institute of Certified Public Accountants (AICPA) Auditing Standards Board issued Statement on Auditing Standards (SAS) No. 78. This statement requires auditors to perform procedures on every audit to enable them to understand their client's control environment including integrity and ethical values. In other words, auditors are specifically required to determine whether their clients' ethical controls are operating. SAS No. 78 points out those ethical values and other elements of the control environment permeate the culture of an organization and affect the strength of all other controls

#### **2.3.1.2 Risk Assessment**

According to Nsereko (1995), credit assessment is the process through which the credit applicant presents the necessary documentation to the bank in order to obtain a loan. Feder et al, (1980) argues that if bank lending is not properly assessed, there is a higher probability that the borrower will not be able or willing to honor their loan repayment obligations. Derban et al, (2005) argues that borrowers should be screened by banks as a form of credit assessment. He further notes that an effective analysis

should include qualitative and quantitative techniques when assessing the borrowers. Mammann et al, (1994) argues that serving borrowers requires strong loan appraisal and monitoring systems.

According to the Credit Reference Bureau Report (2005), Kenyan commercial banks employ rigorous credit assessment processes although they are yet to excel in the management of their loan portfolios. The credit appraisal system remains the only guarantee that loans are repaid by ensuring that only those borrowers who require credit and are able to meet repayment obligations can access credit (Polizatto et al, 1990). Simonson et al, (1999) observed that sound credit policy would help improve prudential oversight of asset quality, establish a set of minimum standards and apply a common language and methodology (assessment of risk, pricing, documentation, securities, authorization, and ethics) for measurement and reporting of non-performing assets, loan classification and provisioning. The credit policy should set out the bank's lending philosophy, specific procedures and means of monitoring the lending activity evaluation. The decision of granting a loan is arrived at after an analysis has been carried out by a committee of more than one person, thus reducing the risk of one person abusing the authority granted.

There are various methods of assessing credit worthiness of borrowers, they include; the 5C's, 5P's, LAPP method, CAMPARI, PACT method, Financial Analysis and Previous Experience Methods. The 5C's, according to Peavler (2013), is an approach of assessing credit worthiness which is defined as follows: Capacity refers to borrower's ability to meet the loan payments of interest and principal. Capital is the money invested in the business and is an indicator of how much is at risk should the business fail. Collateral is a form of security for the lender. Banks usually require collateral as a type of insurance in case the borrower cannot repay the loan. Conditions refer to the economic and political conditions of the country. Character is the obligation that a borrower feels to repay the loan. Since there is not an accurate way to judge character, the lender will decide subjectively whether or not the borrower is sufficiently trustworthy to repay the loan.

Abrahams et al, (2008) argue that Comprehensive Credit Assessment Framework (CCAF) offers a comprehensive rating system that enables lenders to classify credit risk using the Five Cs of credit. Federal Reserve Center (2004), defines 5P's as a

method of evaluating credit applications which consists of People, Purpose, Payment, Protection and Prospective. People; whether the borrower has a history of being honest, reputable and timely in honoring his or her financial obligations. Purpose; there should be a specific explanation of how the borrower is going to use the funds. Payment; knowing the purpose helps identify sources of repayment and aids in structuring the loan repayment schedule based on the timing of the borrower's receipt of funds. Protection; this is collateral and other secondary sources of loan repayment. Prospective is last on the list of P's, Prospective; which refers to how the loan will be supervised, and what the bank will do in the case of borrower defaults. Benz (1979), argues that LAPP Method consists of the following: Liquidity: which measures the ability of the firm to repay its short term obligations, Activity: which measures the size of the firm and its operations, Profitability: which measures how profitable the firm is. Potential: this measures the resources and strength the firm has.

According to Business Coaching (2008), the CAMPARI Model represents 7 variables the bank can use to evaluate credit applications; Character; ability to pay, similar to capacity. Margin of finance; this is the amount the customer contributes from the loan. The purpose of the loan, the amount of the loan and repayment terms; that is the structure, terms of repayment. Insurance; in the event the borrower dies, the loan can be settled from insurance proceeds.

Financial Analysis and Previous Experience Methods as observed by Karsh (2005), depend on analyzing the financial records of the applicants and on its past records of credit. PACT; is another process of assessing a loanee, where P is the Person, A is Activity, C is Collateral and T is Terms. Each variable contains several elements and a weight for these elements is estimated to make them easy to use. Banks choose their credit policies according to the level of risk they are ready to accept. Basel Committee on Banking Supervision (2005), stipulates that, bank's internal rating models are used for more objective approval of loans by inclusion of the client in a class rating and pricing of loans. Most banks ration credit in order to reduce risk and to avoid risk of adverse selection and moral hazard. Lapar et al, (1988) argues that bank's credit lending assessment consists of the screening stage at the evaluation stage, and the quantity rationing stage, hence determines the optimal loan size for a borrower.



Risk management is “a process of understanding and managing the risks that the entity is inevitably subject to in attempting to achieve its corporate objectives; divided into categories such as operational, financial, legal compliance, information and personnel. Enterprise risk management is an example of an integrated solution to risk management” (CIMA, 2005). According to the Institute of Risk Management (IRM), risk management are the processes by which organizations methodologically address the risks to their activities with the goals of achieving sustained benefits within each activity and across the portfolio of all activities (IRM, 2002).

COSO (1992), issued the Internal Control Integrated Framework with the intention of helping businesses and other entities assess, enhance their internal control systems and control their activities toward the achievement of their established objectives. COSO (1992), again issued an Enterprise Risk Management Integrated Framework, which expanded on internal controls, providing a more robust and extensive focus on the broader subject of enterprise risk management providing key principles, concepts, a common language, clear direction and guidance for all organizations.

This incorporated the internal control framework within it and companies may decide to look to enterprise risk management framework both to satisfy their internal control needs and to move toward a fuller risk management process (COSO, 2004). According to COSO, strategic risk management deals with risks and opportunities affecting value creation or preservation, defined as “a process, affected by an entity’s board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity and manage strategic risks to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives” (COSO, 2004).

According to Auditing Practices Committee, “internal control system is the whole system of controls, financial or otherwise, established by the management in an orderly and efficient manner, to ensure adherence to management policies, safeguard the assets and secure as far as possible the completeness and accuracy of the records” (Ojiako, 2012). Maxwell (2008), expanded the definition by including all policies and procedures laid down by the management of an entity to ensure, as far as practicable, the orderly and efficient conduct of its business, including adherence to internal

policies, the safeguarding of assets, the prevention and detection of risk and error, the accuracy and completeness of the accounting records and the timely preparation of reliable financial information.

The internal controls systems are established to ensure that assets are secured and management policies are being followed to the letter with a view to attaining the set goals for the organization (Waweru & Kalani, 2009). The internal control systems are the responsibility of the management; they have the duties of designing an appropriate system of internal control for the organization.

### **2.3.1.3 Information And Communication**

Communication systems represent the institution's channels and methods of conveying important information, policies and directives as cited by Robert & Abbie (2003). In relation to the above, surrounding control environment activities are information and communication systems that enable the organisation's people to capture and exchange the information needed to conduct, manage and control its operations therefore pertinent information must be identified, captured and communicated to appropriate personnel on a timely basis, thus effective communication must flow down, across and up the organisation. Adequate and timely information that enables a satisfactory assessment of the creditworthiness of borrowers applying for a bank loan is crucial for making prudent lending decisions. Prudent lending decisions made on the basis of adequate information on the creditworthiness of borrowers are one of the principal factors in ensuring the financial soundness of banks.

But, there has been serious difficulty in Kenya of getting accurate and timely information on prospective borrowers that facilitates are making of such prudent lending decisions. One of the means for alleviating this difficulty of getting accurate and timely information on prospective borrowers is the establishment of a Credit Information Center (CIC) where relevant information on borrowers is assumed to be pooled and made available to lending banks (Robert et al.; 2003).

Though there is still serious limitations in the accuracy of the credit information extracted the summary of the directive is as follows:

Banks shall provide, alter and update credit information on each and every one of their borrowers using online system. Upon written request by banks, the Supervision Department of the CBK shall provide to the requesting bank, in writing, all credit information available in the Central Database on a prospective borrower within three working days from the date of receipt of the request (Robert et al.; 2003).

Access to the Central Database shall be restricted to the user group. The role of the CBK shall be restricted to administering the Credit Information Sharing system, providing in writing credit information on borrowers available at Credit Information Center to banks, ensuring that access to online system to update or alter credit information is given only to authorized persons and ensuring that the system is operating smoothly and reliably. The CBK shall not be responsible for any damages, claims or liabilities that may arise as a result of inaccurate, misleading or incomplete credit information on borrowers supplied to the Credit Information Center by individual banks and shared, through the CBK, with other banks (Robert et al.; 2003).

Each bank shall provide, electronically, the initial credit and other related information to the Credit Information Center on each and every one of its borrower. Each bank shall be fully responsible for providing accurate, complete and timely credit information to the Credit Information Center. In cases where errors have been made, such errors shall be corrected promptly by the concerned bank. Each bank shall be fully responsible for any damages, claims or liabilities that may arise as a result of providing inaccurate, misleading or incomplete credit information to the Credit Information Center or failure to provide, inadvertently or otherwise, information to the Center that should have been provided in line with these directives.

Each bank shall use the credit information on borrowers obtained from the Central Database of the Credit Information Center only and only for making a lending decision. Such information shall be treated with utmost confidentiality and shall not be disclosed to any third party or used for any other purpose. Each bank shall be fully responsible for any damages, claims or liabilities that may arise as a result of disclosure of credit information on borrowers obtained from the Credit Information

Center to third parties or use of that information for purposes other than for making a lending decision (Robert et al.; 2003).

#### **2.3.1.4 Control Activities**

Ray & Pany (2001), also mention Control activities as another component of internal controls. They note that control activities are policies and procedures that help ensure that management directives are carried out. Controls activities in an organization basically comprise; performance reviews (comparing actual performance with budgets, forecasts and prior period performance), information processing (necessary to check accuracy, completeness and authorization of transactions), physical controls (necessary to provide security over both records and other assets), and segregation of duties (where no one person should handle all aspects of a transaction from the beginning to the end).

The last component of internal control according to Ray & Pany is monitoring. This is aimed at ensuring that the internal controls continue to operate as intended. This can be achieved through ongoing monitoring or separate evaluations. Separate evaluations are non routine monitoring activities such as period audits by the internal auditors (Whittington & Kurt, 2001). Generally, internal control is very important to the reliability of financial statements when the internal control system examined closely in timeliness.

Internal control should be effective when examining design can be extremely beneficial and is usually for organization management and widely to financial statements (Ogneva, Subramanyam, & Raghunandan, 2007). At present, all kinds of business firms have used internal controls through the formation of policies to ensure safeguarding of assets and profitable business environment especially accounting policy, management policy, and operational policy. Hence, internal control should be on a regular basis review in all aspects of their company and insert internal controls that will strengthen the company and increase profitability (Skaife et al., 2007).

According to the high internal control system efficiency, reliability of financial reporting is the only leg of the high quality of internal control efficiency system of internal control (Rick Hayes et al, 2005). The meaning is internal controls are

important to the company's financial trustworthiness for stakeholders, investors or everyone who is using information from financial reporting for decision(s). In this research, internal control effectiveness refers to a sufficient and appropriate internal control that a firm's system concerning of organizational specific policies, rules, and procedures are designed. Internal control effectiveness will be met when the manager designs a reasonable assurance (Reid & Ashelby, 2002) that can achieve company goals and objectives.

Besides, internal control effectiveness is important to the entity level of the firm especially if it provides reliable financial information, safeguards assets and records, encourages adherence to prescribed policies and comply with regulatory agencies (IIA, 2006). The basic concepts of internal controls indicate that management must establish and maintain the entity's controls by risk management efficiency, should provide a quality of compliance applied to all employees with potential of intra organization communication, and effective by a continuous monitoring adequacy (Reid & Ashelby, 2002).

#### **2.3.1.5 Value Of Internal Control And Risk Management**

An organization's system of internal control has a key role in the management of risks that are significant to the fulfillment of its business objectives. A sound system of internal control contributes to safeguarding the shareholders investment and the company's assets. Internal control facilitates the effectiveness and efficiency of operations, helps ensure the reliability of internal and external reporting and assists compliance with laws and regulations (Whittington & Pany, 2000). A company's objectives, its internal organization and the environment in which it operates are continually evolving and, as a result, the risks it faces are continually changing. A sound system of internal control therefore depends on a thorough and regular evaluation of the nature and extent of the risks to which the company is exposed. Since profits are, in part, the reward for successful risk-taking in business, the purpose of internal control is to help manage and control risk appropriately rather than to eliminate it (John, 2011).

### **2.3.2 Internal Control Measures (ICM)**

According to KPMG 2014, Internal Control Measures include physical controls, segregation of duties, reviews by management and internal audit, and external audit to the extent necessary to arrive at their audit opinion. A process of control self-assessment and hierarchical reporting has been established which provides for a documented and auditable trail of accountability. These ICMs are relevant across group operations and provide for successive assurances to be given at increasingly higher levels of management and, finally, to the Board.

ICM documents are reviewed by internal auditors for completeness and accuracy. Planned corrective actions are independently monitored for timely completion. Measures to ensure complete and accurate accounting for transactions. Appropriate authorisation limits for transactions that reasonably limit the company's exposures. Measures to ensure the reliability of data processing and the integrity of the information generated (Robert et al.; 2003). Controls that limit exposure to loss of assets/records or to fraud (e.g. physical controls, segregation of duties). Checks which provide effective supervision of the control activities (e.g. site visits by senior management/routine and surprise checks).

IIARF (2012), state that measures to ensure compliance with laws and regulations that have significant financial implications. Preparation of manuals (e.g. operations/policy) that facilitate the achievement of the above. Policies designed to support the achievement of an organisation's objectives and the management of its risks should be established, communicated and practiced so that people understand what is expected of them and the scope of their freedom to act. The decisions and actions of different parts of the organisation should be coordinated. Control activities should be designed as an integral part of the organisation, taking into consideration its objectives, the risks to their achievement, and inter-relatedness of control elements.

#### **2.3.2.1 Directive Measures**

Banks should establish management information systems and analytical techniques that enable management to measure the credit risk inherent in all on and off-balance sheet activities. The effectiveness of a bank's risk measurement process is highly dependent on the quality of its management information systems since this

information is used by the board and management to fulfill their respective oversight roles. Therefore, the quality, detail and timeliness of information are critical. The information system should provide adequate information on the composition of the credit portfolio, including identification of any concentrations of risk. The measurement of risk should take into consideration: the specific nature of the credit (loan, guarantee, etc) as well as its contractual and financial conditions (maturity, rate, etc.); the exposure to potential market movements; the existence of collateral or guarantees; and the potential for default based on internal risk rating (Van Gestel & Baesens, 2008).

The analysis of credit risk data should be undertaken at an appropriate frequency with the results reviewed against relevant limits (Van Gestel & Baesens, 2008). Banks should use measurement techniques that are appropriate to the complexity and level of the risks involved in their activities, based on robust data, and subject to periodic validation (Robert et al.; 2003).

In particular, information on the composition and quality of the various portfolios, including on a consolidated bank basis, should permit management to assess quickly and accurately the level of credit risk that the bank has incurred through its various activities and determine whether the bank's performance is within the tolerance limits of the credit risk strategy (Whittington & Pany, 2000).

It is important that banks have a management information system in place to ensure that exposures approaching risk limits are brought to the attention of senior management. All exposures should be included in a risk limit measurement system. The bank's information system should be able to aggregate credit exposures to individual borrowers and counterparties and report on exceptions to credit risk limits on a meaningful and timely basis (Whittington & Pany, 2000).

#### **2.3.2.2 Preventive Measure**

Failure to establish adequate procedures to effectively monitor and control the credit function within established guidelines has resulted in credit problems for many banks around the world. Compromising credit policies and procedures has been another major cause of credit problems. Accordingly, each bank needs to develop and

implement comprehensive procedures and information systems to effectively monitor and control the risks inherent in its credit portfolio Muner (2004). These procedures need to define prudent criteria for identifying and reporting potential problem accounts to ensure that such accounts are identified for more frequent review, followed up with appropriate corrective action, adversely classified where appropriate and that provisions are made where necessary. Categorization of the credit portfolio by credit characteristics, risk rating and regular review of individual and groups of credits within the portfolio and independent internal credit inspections or audits are integral elements of effective and prudent portfolio monitoring and control Muner (2004).

### **2.3.3 Internal Control Procedures**

According to AICPA 2014, control procedures are the activities and policies that help ensure that management directives are carried out. They help ensure that necessary actions are taken to address risks to achievement of the entity's objectives. Control activities occur throughout the organisation, at all levels and in all functions. They include a range of activities as diverse as approvals, authorisations, verifications, reconciliations, reviews of operating performance, security of assets and segregation of duties. Information and communication processes and pertinent information must be identified, captured and communicated in a form and time-frame that enables people to carry out their responsibilities.

Information systems produce reports, containing operational, financial and compliance-related information, that make it possible to run and control the business. They deal not only with internally generated data, but also information about external events, activities and conditions necessary to make informed business decision-making and external reporting. Effective communication must also occur in a broader sense, flowing down, across and up the organisation. IIA RF (2012), assert that all personnel must receive a clear message from top management that control responsibilities must be taken seriously. They must understand their own role in the internal control system, as well as how individual activities relate to the work of others. They must have a means of communicating significant information upstream.



There also needs to be effective communication with external parties, such as customers, suppliers, regulators and shareholders and the processes for monitoring the effectiveness of the system of internal control. Internal control systems need to be monitored - a process that assesses the quality of the system's performance over time (Robert et al.; 2003).

This is accomplished through ongoing monitoring activities, separate evaluations or a combination of the two. Ongoing monitoring occurs in the course of operations. It includes regular management and supervisory activities, and other actions personnel take in performing their duties (Muner, 2004). The scope and frequency of separate evaluations will depend primarily on an assessment of risks and the effectiveness of ongoing monitoring procedures. Internal control deficiencies should be reported upstream, with serious matters reported to top management and the Board (Muner, 2004).

#### **2.3.3.1 Internal Control Systems**

Internal control systems are whole systems of internal controls, financial and otherwise, established in order to provide reasonable assurance of: effective and efficient operation; internal financial control and compliance with laws and regulations. While internal control systems include all the policies and procedures (internal controls) adopted by the directors and management of an entity to assist in achieving their objectives of ensuring, as far as practicable, the orderly and efficient conduct of a business, including adherence to internal policies, the safeguarding of assets, the prevention and detection of fraud and error, accuracy and completeness of the accounting records and the timely preparation of reliable financial information (CIMA, 2006).

A strong internal control is one of the best defenses against business failures and an important driver of business performance. When a vibrant organization suddenly goes bankrupt the main question is "what went wrong" and often answers point to weak controls. After assessing key risk areas, these risks would need to be managed in line with a defined risk management strategy. RMS is appropriately derived from internal controls that seek to mitigate unacceptable levels of risks with each control addressing

a defined risk or be part of a regulatory requirement that addresses the risks of breaching of laws, procedures and rules.

According to COSO 2004, "Internal control is broadly defined as a process, affected by an entity's board of directors, managers and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in Effectiveness and Efficiency of operations, Reliability of financial reporting, and Compliance with applicable laws and regulations. ICS are put in place not only to help companies reach profitability goals and achieve their missions, but also to minimize surprises along the way. An ICS enables management deal quickly with changing economic, competitive environments, markets, shifting customer demands, priorities and restructuring.

The COSO report deals with the needs/expectations of stakeholders, describes internal control in order to establish a common definition that serves the needs of different parties and to provide a standard against which organizations can assess their control systems and determine how they can be improved. Everyone in the organization is responsible for the internal control, yet in different ways. Management is responsible for the establishment of internal control policies and procedures and are also accountable to the board of directors, who are responsible for providing governance, guidance and oversight, and all personnel are responsible for reporting problems, such as policy violations or illegal actions (COSO, 2004).

AICPA (1949), defined ICS as including operational, financial reporting and compliance aspects of internal control. (Mautz and Winjum, 1981), later amended in 1958 and 1972 successively, then separated controls into accounting controls and administrative controls. AICPA directs accountants and auditors' attention on traditional accounting controls such as authorization, segregation of duties, cross-checking, in order to minimize litigation risks. This narrows the focus of control. The reason for restricting accountants and auditors' responsibility to accounting and administrative controls is much of a debate. As a result of technological advancements and changing management techniques, organizations employ less people and are therefore less able to perform many internal accounting controls, for example, layers of authorization, cross-checking, segregation of duties, supervision

etcetera. A range of control elements are therefore required in order for internal controls to be effective.

The COSO framework (figure 1) shows three objectives: Operations (which has to do with how effective and efficient an entity uses its resources), Financial Reporting (which deals with the preparation of reliable financial statements) and Compliance (which relates to an organization's compliance with applicable laws and regulations). The framework identifies five basic control components: Control Environment, Control Activities, Risk Assessment, Information and Communication, Monitoring and the different units of application. The objectives show what an organization strives to achieve and the components show what is needed to achieve these objectives at different levels of the organization. All the components are related to each objective. For example, when talking about the reliability of financial reporting, all the five components must be present and functioning effectively in order to conclude that an organization's internal control over reliable financial information is effective.

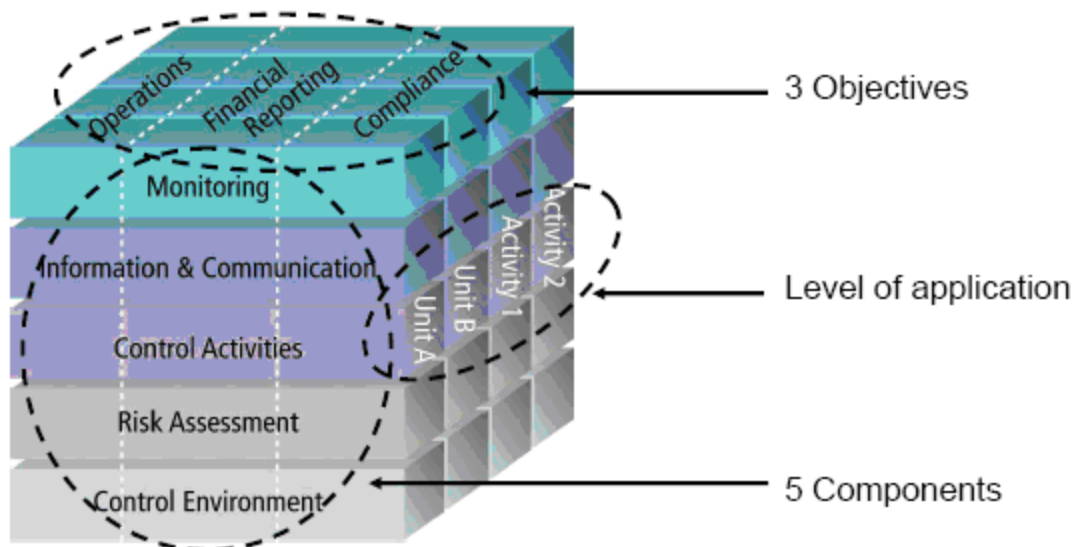


Fig 1: The COSO Internal Control System

Source: Adapted from the 2004 COSO

Effective internal control requires a strong control environment under which the other components are implemented. The principles underlying good control and commitment to sound control compliance must be present so as to ensure healthy

interactive control structure. Risk assessment forms the basis for determining where internal control activities are needed. This enables the organization to focus on those risks that will impact on the overall success of the firm. Communicating information resulting from the exercise of internal controls keeps key personnel and management informed of potential problems. An effective monitoring system is an ongoing assessment program that oversees the design, implementation and effectiveness of controls in mitigating risks (CIMA, 2006).

Internal control must also be tailored to meet the needs of the individual business. This is because the more elaborate organization's control systems is, the greater the cost (IRM et al., 2002). The scandals of recent years emphasized the need to evaluate, scrutinize and reformulate control systems of checks and balances in order to guide corporate executives and persons in decision-making. Therefore as much as an organization would like to implement appropriately derived control measures, it must also consider the amount of money involved in implementing such measures.

Finally, there is the need for companies to have a risk protection strategy (Chorafas, 2008). Insurance is known to be one of the methods used by companies as risk financing in order to obtain financial protection against the impact of risks. However, it must be noted that losses such as organizational reputation and employee morale are uninsurable and difficult to regain once they are lost. Therefore, organizations must put in effort to maintain their reputation and goodwill.

#### **2.3.3.2 Compliance**

Banks are facing expanding compliance expectations that are pushing compliance programs to the brink. The scope and nature of compliance have evolved and are no longer limited to rules-based banking regulations. Operational and compliance risks have become more complex and entwined, increasing the potential for failed processes that cause customer confusion and compliance control breakdowns. Without a new approach to compliance and operational risk management, many banks will continue to face high costs and losses in the form of escalating litigation, penalties, and staffing needs.

Given the major changes in the compliance and regulatory landscape and the resulting long-term impact on banks, incremental adjustments will simply not be enough. To start, it is recommended that banks take a look at six innovative approaches to drive change: Integrate relevant aspects of operational and compliance risk management, Simplify products and channels, Leverage analytics, Standardize compliance testing, Adopt lean principles & Manage change.

#### **2.3.3.3 Reliability**

Accurate, complete and timely data is a foundation for effective risk management. However, data alone does not guarantee that the board and senior management will receive appropriate information to make effective decisions about risk. To manage risk effectively, the right information needs to be presented to the right people at the right time. Risk reports based on risk data should be accurate, clear and complete. They should contain the correct content and be presented to the appropriate decision-makers in a timely manner that allows for an appropriate response. A bank's risk management reports should contribute to sound risk management and decision-making by their relevant recipients, including, in particular, the board and senior management. To ensure the usefulness of these reports, they should comply with the following principles. Compliance with these principles should not be at the expense of each other.

#### **2.3.3.4 Effectiveness**

There are unique risks for each organization, given the nature of operations, although generally organizations within the same sector will have common risk elements. The appropriate risk response will be different from organization to organization, depending on how management views the risk in terms of magnitude. Risks are represented in the external environment in which the organization chooses to operate, as well as those in the internal environment. Risk factors in the external environment and generally outside of the organization's direct control include politics, the economy, regulations, natural disasters and competition. Examples of those within an organization's control include reputation, safety of employees, safeguarding of assets, ethics and culture.

#### **2.3.4 Internal Audit and Audit Committee**

Under the principles of good corporate governance, internal audit and audit committee are very important to the operations of an organization, as they ensure the management of regular and adequate performance of internal control, seeking deficiencies, weaknesses and enhancing more efficient operations. Internal control office reports directly to the Audit Committee for the purpose of complete system of checks and balances (Amir, 2004). Ordinarily, the internal auditor does not get involved in any decision making process on risk management. It is felt that in the case of risk management it would be prudent for the internal auditor to have a say. The internal auditor only ensures that risk management practices adopted by the concerned departments are adequate, considering the nature of various risks and their likely impact on the business operations of the company.

In a large company, different departments, depending on the nature of risk involved, may handle the risk management function. It would therefore be necessary for the internal auditor to first get a fair idea of the various categories of risks and action to be taken to confirm that enough safeguards are put in place for managing these risks. In the case of other risks like environmental and technological risks, the internal auditor may not have an expert knowledge of the severity of the risks and would have to get help from the concerned departmental heads to critically examine the process of the risk management (Van Gestel & Baesens, 2008). It would also be necessary for the internal auditor to weigh the impact of all these risks on the financial performance of the company and make a suitable report to the board of the company.

##### **2.3.4.1 Risk Management**

Risk management is mainly focused on reducing earning volatility and avoiding large losses. One proper risk management procedure needs to identify the risk, measure and quantify risk then develop strategy to manage risk (Van Gestel & Baesens, 2008).

Risk management process includes identification, measurement, treatment and implementation. The most important step of risk management, identification, can begin from analyzing the sources of potential risks or defining threats.

Secondly, measurement needs to quantify the risk which has been identified in the identification step (Van Gestel & Baesens, 2008). For example, individual needs to measure the real default probability and how much the change of risk drivers influence the default probability. In this step, statistical analysis is analysis needed for the risk measurement (Van Gestel & Baesens, 2008).

The third step in risk management is treatment (Van Gestel & Baesens, 2008). Risk can be treated through four ways: risk avoidance, risk reduction, risk acceptance and risk transfer (Van Gestel & Baesens, 2008, p.43). Risk avoidance is a simple way of treatment which refers to individual investing in the products that are not too risky (Van Gestel & Baesens, 2008, p.43). Avoidance does not imply avoiding all risks. One strategy can be investing in counterparts with low exposure risk or investing only small proportion in counterparts with high default (Van Gestel & Baesens, 2008, p.43). Risk reduction states reducing the portion of risk taken which means use collateral to reduce the actual loss. Risk acceptance is commonly applied for low-risk assets (Van Gestel & Baesens, 2008). It emphasizes the diversification of investments in various sectors and countries. And risk transfer implies transfer risk to other institutions such as banks, insurances or companies. This treatment provides a guarantee to credit risk such as credit derivatives (Van Gestel & Baesens, 2008).

After finishing the treatment in the risk management procedure, risk management strategy should be implemented (Van Gestel & Baesens, 2008). Implementation should put people, statistical model and IT infrastructure to measure the underlying risk of current and future investment (Van Gestel & Baesens, 2008). It also needs a guideline for risk treatment to select counterparts in which to invest or not; which limit exposure of risky product should be determined; whether collateral for specific loans is mandatory or not and whether individual buys financial protection to secure investment (Van Gestel & Baesens, 2008). Such implementation of risk management is usually supervised by senior management and the risks need to be continuously reported and monitored (Van Gestel & Baesens, 2008).

In the end, effective risk management process is usually evaluated frequently. This step refers to check whether the final risk taking keeps in line with the strategy and in a correct way of application. Specifically, it means the evaluation of risk drivers and

measurement process (Van Gestel & Baesens, 2008).

The reason for conducting risk management is due to banks and banking activities that have evolved significantly over the time (Van Gestel & Baesens, 2008). With the introduction of money, financial services such as deposit taking, lending money and money transfer have gradually become important. So that banks are exposed to credit, market, operational, interest rate and liquidity risk. Efficient management on these risks is necessary for banks to reduce its losses on earning, insolvent and those depositors that cannot be refunded (Van Gestel & Baesens, 2008). Another reason why banks need to carefully monitor risk is that regulators require them to do it (Hull, 2012,). However, it is error to believe that meeting regulatory requirements is the sole for establishing a sound, scientific risk management system .

Managers need reliable risk measures to direct capital to activities and estimate the size of potential losses to stay within limits imposed by available capital, creditors and regulators (Pyle, 1997). They need mechanisms to monitor positions and create incentives to be prudent in taking risk. Consequently, risk management is the process by which managers satisfy these needs by identifying key risks, obtaining consistent, understandable, operational risk measures, deciding which risks need to be managed and by which methods, and establishing procedures to monitor the resulting risk position (Pyle, 1997).

#### **2.3.4.1 Credit risk**

Credit risk is the major risk that banks are exposed during the normal course of lending and credit underwriting. Credit risk arises from non-performance by a borrower. For most banks, loans are the largest and most obvious source of credit risk; however, credit risk could stem from activities both on and off balance sheet. It may arise from either an inability or an unwillingness to perform in the pre-committed contracted manner. In a bank's portfolio, losses arise from outright default due to inability or unwillingness of a customer or counter party to meet commitments in relation to lending, trading, settlement and other financial transactions. Alternatively losses may result from reduction in portfolio value due to actual or perceived deterioration in credit quality (Van Gestel & Baesens, 2008).



Credit risk comes from a bank's dealing with individuals, corporate, banks and financial institutions or a sovereign. Credit risk does not necessarily occur in isolation. The same source that endangers credit risk for the bank may also expose it to other risk. For instance a bad portfolio may attract liquidity problem. Credit Risk According to Gregoriou and Hoppe (2008), bank loan is a debt, which entails the redistribution of the financial assets between the lender and the borrower. The bank loan is commonly referred to the borrower who got an amount of money from the lender, and need to pay back, known as the principal. In addition, the banks normally charge a fee from the borrower, which is the interest on the debt. The risk associated with loans is credit risk. One of the principal duties of financial institutions is to provide loans, this is typically the source of income to banks, bank loans and credit also constitute one of the ways of increasing money supply in the economy (W aymond, 2007).

The Central Bank of Kenya (CBK) defines Non Performing Loans (NPL) as those loans that are not being serviced as per loan contracts and expose the financial institutions to potential losses. It is important to note that non-performing loans refer to accounts whose principal or interest remains unpaid 90 days or more after due date. According to the Central Bank of Kenya Supervision Report, the level of non-performing loans has been increasing steadily from shs.56 billion in 1997, to shs.83 billion in 1998 to shs.97 billion in 1999. This high level of non-performing loans continues to be an issue of major supervisory concern in Kenya.

The recent financial crises in USA and Europe suggest that NPL amount is an indicator of increasing threat of insolvency and failure. However, the financial markets with high NPLs have to diversify their risk and create portfolios with NPLs along with performing loans, which are widely traded in the financial markets. In this regard, Germany was one of the leaders of NPL markets in 2006 because of its sheer size and highly competitive market (M isati, Njoroge, Kamau, & Ouma, 2010).

According to M isati et al. (2010), as pressure mounts on the banking industry's profitability resulting from over reliance on interest income by banks, it is strategically imperative that banks focus on other revenue streams. National Industrial Credit Bank (NIC) has introduced new products to diversify revenue and to keep its head above the water. They added that part of NIC Bank's strategy has been to

diversify revenues, by expanding the scope of its activities in addition to its predominant asset finance focus and offering more general commercial banking facilities and other products.

Premium financing and provision of custodial services have reduced over reliance on interest income. Several banks in the country are already harvesting the fruits of prudent risk management practices (Amir, 2004). According to the Basel Accords, banks face various risks, that are, credit risk, market risk and operational risk. Market risk is defined as the risk of losses in on and off balance sheet positions arising from movements in market prices. The capital treatment for market risk addresses the interest rate risk and equity risk pertaining to financial instruments, and the foreign exchange risk in the trading and banking books.

Operational risk is defined as the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events. A firm wide risk management framework is an amalgam of strategy, process, infrastructure and environment which helps such institutions make intelligent risk taking decisions prior to committing limited resources and then helps to monitor the outcome of these decisions (Altman & Sabato, 2005). This integration approach to managing risks ensures full risks identification, risk awareness, risk assessment, measurement and control and finally evaluation.

In response to recent corporate and financial disasters, regulators have increased their examination and enforcement standards. In the banking sector, Basel II has established a direct linkage between minimum regulatory capital and underlying credit risk, market risk and corporate risk exposure of banks (W Raymond, 2007). This step gives an indication that capital management is an important stage in risk mitigation and management. However, development of effective key risk indicators and their management pose significant challenge. Some readily available sources such as policies and regulations can provide useful direction in deriving key risk indicators and compliance with the regulatory requirement can be expressed as risk management indicators.

A more comprehensive capital management framework enables a bank to improve profitability by making better risk based product pricing and resource allocation (Altman & Sabato, 2005). Because of the dire consequences of credit risk, it is important that credit managers perform a comprehensive evaluation of credit risk covering the credit portfolio management, lending function and operations, credit risk management policies, non performing loans portfolio, asset classification and loan provisioning policy. This review must be done at least annually. Credit risk management is the process of evaluating risk in an investment. When the risk has been identified, investment decisions can be made and the risk vis a vis return balance considered from a better position. Credit risk can be reduced by monitoring the behavior of clients who intend to apply for credit in the business. An important aspect in credit risk management is credit assessment. Due to the dire effects of credit risk, whereby if not well managed can lead to bank failure, it is important for a bank to have capacity to assess, administer, supervise, control, enforce and recover loans, advances, guarantees and other credit instruments (Joetta, 2007).

It is the responsibility of management to set up a credit administration team to ensure that once credit is granted it is properly maintained and administered. Procedures for measuring a firm's overall exposure to credit risk as well as stringent internal rating systems should be adequate (W Raymond, 2007). All companies that do not currently have independent risk management structures must immediately set up units that will concentrate fully on the risk management function. This risk management function within an institution should report directly to the board, to ensure independence.

The importance of credit risk management has never been more important with the current high default rates and high provisioning. Indeed in 1999, at the end of the benign credit cycle, banks, regulators and financial market practitioners were spending considerable time on this subject due to increased emphasis on sophisticated risk management techniques in a challenging environment, refinements in credit scoring techniques, establishment of relatively large database of defaults, recoveries and credit mitigations, development of offensive credit risk mitigation techniques such as securitizations, credit derivatives and credit insurance products (Altman, 2002).

Financial institutions use various techniques of mitigating credit risk. The most common are collateral, guarantees, netting off of loans against deposits of the same counter-party. The payments are netted off against the receipts and the balance is paid thus reducing the credit risk. Credit Insurance, factoring, debt collection, surety bonds, and letter of credit are other techniques widely used. While use of these techniques will reduce or transfer credit risk, other risks may arise which include legal, operational, liquidity and market risks (Stutz, 1985). The dictum in finance says that "The greater the risk, the higher the return". Therefore risk can be seen both as an opportunity and as a threat; opportunity, because the most risky businesses are also highly profitable. Risk is a threat because it includes a possibility of losing part or the whole of your investment.

Risk cannot however be done away with. Venkat (1999), argued that most business managers would agree that it is neither possible nor desirable to completely eliminate risk from the business proposition. What is required is an understanding of all risks that arises from a particular business and managing those risks effectively. The purpose of Basel II is to create an international standard about how much capital banks need to put aside to guard against the types of risk banks face.

In practice, Basel II tries to achieve this by setting up meticulous risk and capital management requirements aimed at ensuring that a bank holds capital reserves appropriate to the risks the bank exposes itself to. These rules imply that the greater risk which bank is exposed to, the greater the amount of capital a bank needs to hold to safeguard its solvency (Montgomery, 2005). The theoretical banking literature is, however, divided on the effects of capital requirements on bank behavior and consequently, on the risks faced by the institutions.

Some academic works point toward that capital requirement which clearly contributes to various possible measures of bank stability. On the contrary, other works conclude that capital requirements make banks riskier institutions than they would be in the absence of such requirements (Joetta, 2007). Vanhouse (2007), has discovered numerous aspects that explain the differing implications of portfolio-management models for the responsiveness of bank portfolio risk to capital regulation.

Results depend on banks being either value-maximizing or utility-maximizing firms; bank ownership (if limited liability) and whether banks operate in complete or incomplete asset markets. Moreover, the effects of capital regulation on portfolio decisions and therefore on the banking system's safety and soundness eventually depend on which perspective dominates among insurers, shareholders, and managers in the principal-agent interactions. Credit Risk Management Greuning and Bratanovic (2003), defined credit risk as the chance that a debtor or a financial instrument issuer will not be able to pay interest or repay the principal according to the terms specified in a credit agreement. It means that payments may be delayed or ultimately not paid at all, which may cause cash flow problems and affects banks liquidity.

Credit risk is the most important area in risk management. More than 80% of all banks balance sheet relate to credit. All over the world exposure to credit risk has led to many banks failure. Credit risk exposure particularly to real estate led to widespread banking problems in Switzerland, Spain, The United Kingdom, Sweden, Japan and others. Here in Kenya, Obiero (2002), found that credit risk was only second to poor management in contributing to bank failures. On perception, Idarus (2005), found that credit risk was the most important area of risk management in Kenya.

Risk management means, increasing the likelihood of success, reducing the possibility of failure and imiting the uncertainty of all the overall financial performance. Best (2001), argued that the purpose of risk management is to prevent an institution from suffering unacceptable loss. He went on to explain that "unacceptable loss" is one which either causes an institution to fail or materially damages its corporate position. Banks must monitor the ever changing micro and macroeconomic environment to identify the risks therein and find ways of managing these risks. Developing economies in the world, Kenya included, face more uncertainties than the developed counterparts.

Banking business in developing worlds therefore faces more risks. Failure to manage risks effectively in the respective banks leads to bank failures. One bank failure may have a contagion effect on the other banks leading to a systematic failure of the whole banking industry in a country or even a whole region as witnessed during the Asian

Bank crisis (1997-1998). Kenya has had its share of bank failures. Obiero (2002), noted that in 1993 alone, 14 banks in Kenya collapsed. In recognition of the high risks involved in banking, the Central Bank of Kenya published risk management guidelines for the purpose of providing guidance to all financial institutions on the minimum requirements for a risk management framework and strategy.

It has classified the risks facing financial institutions into nine classes namely: strategic risk, credit risk, liquidity risk, interest rate risk, price risk, foreign exchange rate risk, operational risk, reputation risk and regulatory risk. Banks can project the average level of credit losses it can reasonably expect to experience.

#### **2.3.4.2 Strategic Risk Management and Internal Control Systems in Kenya**

Good governance is dependent on management that understands the risks it faces and is able to keep control of the business. Banking regulations have subsequently been updated in 2003 making clear the responsibilities of board of directors and management. According to the Code, corporate governance regulates the division of roles between shareholders, board of directors and executive management beyond the requirements of the legislation. Section ten of the code is on risk management and internal control as shown on the regulation, cover the board of directors' responsibilities for determining risk profile, approving the organization's operations, delegating responsibilities, assigning authority and also stipulating reporting and internal control requirements (CBK, 2009).

#### **2.3.4.3 Importance of Strategic Risk Management and Internal Control Systems**

Risk is defined as the combination of the probability of an event and its consequences (IRM, 2002). According to ICAEW (1999), risk is defined as real or potential events which can reduce the likelihood of achieving business objectives. The term involves the potential for both gain and exposure to loss. Risk management and internal controls are means by which businesses' opportunities are maximized and potential and material losses are reduced. An organization sets strategic and operational objectives and then manages the risks that threaten these objectives. Internal control is put in place to help manage risks and increase shareholders' value. Risks can be managed by transferring them to third parties such as an insurance company.

The environments in which organizations operate are evolving constantly and as such, the risks facing these organizations change too. Therefore, a company's systems of risk management and internal control must be responsive to these changes in order to be successful. Important elements of a sound internal control system are effective financial controls, including the management of proper accounting records. Since risks exposed to a company cannot be completely eliminated, the role of internal control is to help manage and control these risks appropriately. They make sure that organizations are not exposed to avoidable risks and that financial information received and used both in the company and by the public is accurate and reliable. Therefore, a company's internal control systems play a key role in the management of risks that significantly affect the achievements of operational, financial reporting and compliance objectives (Joetta, 2007).

#### **2.3.4.4 Problems Related To Risk Management and Internal Control Systems**

In spite of modern business planning models and methods adopted by many organizations, risk assessment is performed non-systematically and intuitively and the risk management plan is not prepared at all (Collier, 2007). Due to this, problems are solved once they arise, usually rather too late. Notwithstanding the notion of risk as an event having a potential negative impact on business objectives, an integrated risk management system is to assess positive outcomes as well. In view of risks exposed to business goals, organizations develop and implement systems of internal controls, which act as preventive measures.

It is therefore important to assess whether internal controls that are put in place and the related risks are adequately linked. Companies face lots of challenges when it comes to risk management and the implementation of internal control systems (Collier, 2007). Among the problems are lack of technical knowledge; the process of risk management lacks a clear definition and has a low level of formalization, managers and individual units of the organization have different understanding of risks and their assessment criteria, high cost of information and high costs attributed to internal controls exceed the impact of a respective risk, processes of achieving compliance with external requirements (namely, those set by supervisory bodies, a

controlling company, etcetera) are expensive and sometimes ineffective (Collier, 2007).

#### **2.4 Empirical literature review**

Internal control systems are a critical component of any organization's management and a foundation for its safe and sound operations (Drogalas et al., 2005; Karagiorgos et al., 2010). Internal control comprises five components; the control environment, the entity's risk assessment process, the information and communication systems, control activities and the monitoring of controls (Hayes et al., 2005). Companies with elaborate ICSs are observed to be significantly larger, more highly regulated, more competitive, more profitable, more liquid, more conservative in their accounting policies, more competent in their management and accounting, and subject to better management controls (Wallace & Kreutzfeldt, 1991).

A study by Goodwin-Stewart & Kent (2006), using a sample of Australian listed companies, showed that the existence of an Internal Control System is positively associated with firm size and commitment to risk management. The risk and control awareness have an influence on the scope of the ICS (Sarens & De Beelde, 2006). These results suggest that when management is aware of risks and control activities, they are more likely to understand the role of the ICS in monitoring risk and control activities, thus it is more likely that they will support a relatively larger ICS (Sarens & De Beelde, 2006; Selim & McNamee, 1999). According to Kotler (1992), strong performing firms are those that can stay in business for a good number of years. Dwivedi (2002), also found out that, the ability of a firm to survive in business is an indicator of good financial performance. Katuntu (2005), asserts that lack of or weak ICSs are therefore an indicator of poor financial performance.



## 2.6 Conceptual Framework

### Independent Variables

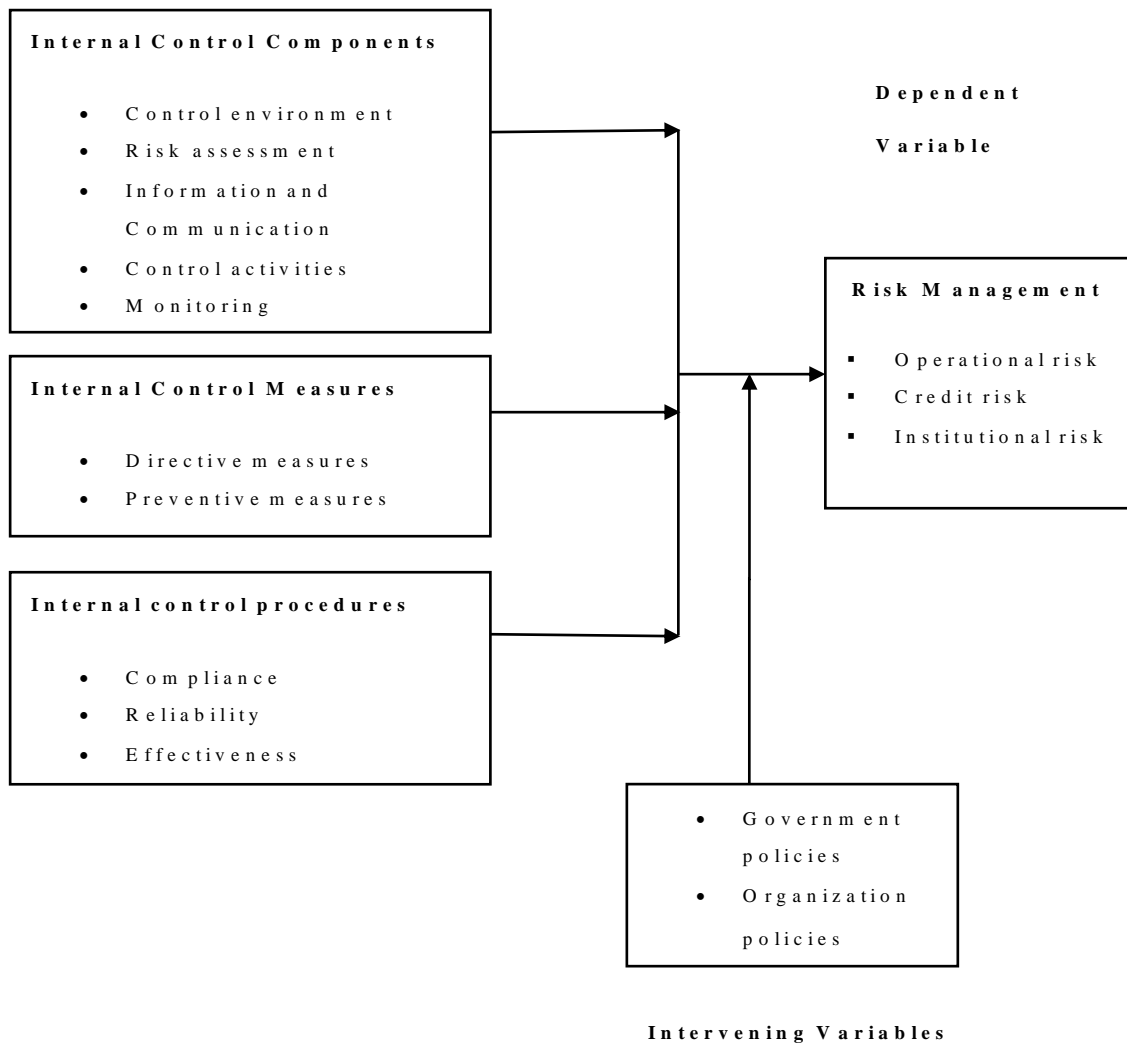


Figure 2: Conceptual Framework - Relationship between the Variables

## 2.7 Research Gap

There exist a gap in literature in the sense that majority of the studies (touching on this subject and specific variables considered in this study) were either done on a single risk element like credit risk management or on operational risk. Moreover, these studies were done in developed economies hence leaving scarce literature in developing economies. This study sought to fill the existing research gap by answering the question, is there a relationship between internal control systems and risk management in commercial banks?

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter contains the research design, target population, sample and sampling procedures, description of research instruments, description of data collection procedures and description of data analysis procedures.

#### **3.2 Research Design**

The study adopted a survey design. Survey methodology studies involve sampling of individual units from a population. Survey research was adopted because it was specific and limited, and also it has more global, widespread goals (Kothari 2003).

#### **3.3 Target Population**

Mugenda and Mugenda (2003), describes target population as that population to which a researcher wants to generalize the results of a study. The study considered all the Commercial Banks in Nakuru town as at 31<sup>st</sup> December 2014, licensed and registered under the Banking Act. According to the Central Bank of Kenya, there were 28 licensed banks as at 31<sup>st</sup> December 2014 operating in Nakuru town. The study targeted two respondents, one from relationship/credit departments and another one from operation departments to collect data from .

#### **3.4 Sampling Procedure**

The researcher adopted purposive sampling technique whereby the respondents that had the required information was used in the study, therefore a sample of 56 respondents was considered.

#### **3.5 Data Collection Techniques**

The present study used primary data which was collected using a structured questionnaire. Closed ended questions covering all the objectives were also used.

#### **3.6 Method of data analysis**

The data was analyzed using both descriptive and inferential statistics. Frequency, percentages and Chi-square were used for descriptive statistics while Pearson

Correlation and Multiple linear regression were used to describe the relationship between independent variables and the dependent variable. The analysis of the data was aided by the Statistical Package for Social Sciences (SPSS) and results presented in form of tables.

The regression model:  $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

Where;

Y = Risk Management

$\alpha$  = constant

$\beta_1 \dots \dots \beta_3$  = parameter estimates

$X_1$  = Internal control components

$X_2$  = Internal control measures

$X_3$  = Internal control procedures

$\varepsilon$  = Error term, normally distributed, with mean zero and a constant variance

### 3.7 Validity and Reliability

The questionnaires were designed carefully, with consultations of a risk management expert to ensure no ambiguity and that all respondents understood and responded to all the issues in exactly the same way as was expected by the study. The instruments were subjected to a pilot study in Nakuru town.

**Table 3.1 Measures of internal consistency**

<b>V a r i a b l e</b>	<b>C r o n b a c h ' s A l p h a</b>	<b>C r o n b a c h ' s A l p h a</b>	<b>N o o f I t e m s</b>
		<b>B a s e d o n S t a n d a r d i z e d I t e m s</b>	
Internal control components	0.878	0.884	4
Internal control measures	0.773	0.770	6
Internal control procedures	0.832	0.830	6
Risk management	0.890	0.890	12

From Table 3.1, the level of consistency on all items is above 0.843 and therefore removal of any one variable will lead to a reduction of the level of cronbach's alpha. The formula by Cronbach, L.(1970) is used to calculate the composite reliability is as follows:

$$\rho_c = \frac{(\sum \lambda)^2}{[(\sum \lambda)^2 + \sum(\theta)]}$$

W here  $\rho_c$  = composite reliability

$\lambda$  = indicator loadings

$\theta$  = indicator error variances (i.e. variances of the  $\delta$ 's or  $\epsilon$ 's)

s = summation over the indicators of the latent variable

## CHAPTER FOUR

### DATA ANALYSIS, INTERPRETATIONS AND DISCUSSIONS

#### 4.1 Introduction

This chapter comprises of a presentation of results and their interpretation according to the objectives of the study. The chapter begins with the demographic characteristics of the respondents such as educational level, tenure and gender which were all presented using cross tabulations. The descriptives for the items in the instrument were also presented using frequencies and percentages for each item to define the relative opinion of the respondents for that particular item. The results from the correlations and the regression analysis are presented.

##### 4.1.1 Response Rate

The sample characteristics were presented from responses coming from the respondents.

**Table 4.1: Distribution of Responses by department category**

Department Category	Frequency	Percent
Relationship/Credit Departments	26	89.3
Operation Departments	30	96.4
<b>Total</b>	<b>56</b>	<b>92.85</b>

Source: Research data, 2015

The response rate for the study was 93% , where 89% of the respondents were from Relationship/Credit Departments while 96% were from the Operation Departments. The return rate was considered sufficient to represent the banks in Nakuru Town.

#### 4.2 General Characteristic of the Respondents

The general information of interest to the researcher included the department, gender of respondent, level of management position, length service in the Bank industry and their education level.

##### 4.2.1 Gender Of The Respondents

The distribution of respondents gender for the two categories of staff employed is shown on Table 4.2. The findings show that majority of the Relationship/Credit

Departments (60%) were female while minority (40%) was male. On the contrary, for the operations department, majority (67%) were male while 33% were female.

**Table 4.2: Gender Distribution of Respondents**

		<b>Middle level Management</b>			
		<b>Relationship or</b>			
		<b>Credit</b>	<b>Operations</b>		
		<b>Departments</b>	<b>Department</b>	<b>Total</b>	
<b>Gender</b>	Male	Count	10	18	28
		% within employment	40%	67%	53.8%
	Female	Count	15	9	24
		% within employment	60%	33%	46.2%
<b>Total</b>		Count	25	27	52
		% within employment	100.0%	100.0%	100.0%

Source: Research data, 2015

These findings imply that the middle level management of Banks in Nakuru Town is dominated by the male gender although overall the two thirds gender rule is observed where overall 46% of them were female and the rest were male. It can also be construed that from the results that, the male were more responsive compared to their female counterparts and that gender parity in the banking industry could be seen as an indicator of inclusiveness and prudence in staffing.

#### 4.2.2 Education Level of Respondent

This section deals with the respondents' education level. It encapsulates Masters Degree, Bachelors Degree, Diploma and Certificate.

**Table 4.3: Education Level of Respondent**

			<u>Middle level Management</u>		
			Relationship or		
			Credit	Operations	
			Departments	Department	Total
<b>Education level</b>	Masters Degree	Count	3	14	17
		% within employment	12%	51.8%	33.3%
	Bachelor's degree	Count	20	11	31
		% within employment	80%	40.7%	59.6%
	Diploma	Count	2	2	4
		% within employment	8%	7.4%	7.6%
	Certificate	Count	0	0	0
		% within employment	.0%	.0%	0
<b>Total</b>		Count	25	27	52
		% within employment	100.0%	100.0%	100.0%

Source: Research data, 2015

The results in Table 4.3 show the education levels of the Relationship/Credit and Operations departments of the banks in Nakuru. 3 (12%) of the relationship/credit department had masters degree; while those with bachelors degree being 20 (80%); while those with diploma were 2 (8%). 14 (51.8%) of the operations department had Masters level education while those with Bachelor's degree being 11 (40.7%) and those with diploma being 2 (7.4%).

### 4.2.3 Experience of respondents in years

Further, the experience of managers was determined based on the number of years in service in the Banking industry. Majority, (34.6%) of the respondents had between 3 and 5 years of experience in the bank. This implies that most of the respondents had experience enough to respond to the matters of prudent risk management in Banks. However, a few (9.6%) managers had less than 2 years of experience therefore could have challenges in ensuring prudent risk management in the bank.

**Table 4.4: Experience of the respondents in the Bank**

		<b>Middle level Management</b>			
		<b>Relationship/Credit Operations</b>			
		<b>Departments</b>	<b>Department</b>	<b>Total</b>	
Length of time worked in Bank	0-2 years	Count	2	3	5
		% within employment	8%	11.1%	9.6%
	3-5 years	Count	8	10	18
		% within employment	32%	37%	34.6%
	6-8 years	Count	8	8	16
		% within employment	32%	29.6%	30.7%
	> 8 years	Count	7	6	13
		% within employment	28%	22%	25%
	<b>Total</b>	Count	25	27	52
		% within employment	100.0%	100.0%	100.0%
			category		

Source: Research data, 2015



### 4.3 Internal Control Components

The study sought to assess the effect of internal control components on the risk management of commercial banks. First, the respondents were asked to rate the internal control components. The responses are presented in Table 4.5.

**Table 4.5 Internal Control Components**

Statement	SA Freq (%)	A Freq (%)	N Freq (%)	D Freq (%)	SD Freq (%)	$\chi^2$	P- Value
The organization structure of our bank is designed in a manner to support controls internally.	31 (59.6)	15 (28.8)	3 (5.7)	2 (3.8)	1 (1.9)	175.931	0.0001
Our bank's policies supports use of internal control components in risk management.	35 (69.2)	12 (23)	3 (5.7)	1 (1.9)	1 (1.9)	188.302	0.0001
Our bank's ethical considerations are structured in a manner that supports controls internally.	37 (71.1)	15 (28.8)	-	-	-	177.181	0.0001
Management philosophy advocates the use of internal controls within the organization.	33 (63.4)	10 (19.2)	7 (13.4)	1 (1.9)	1 (1.9)	258.388	0.0001

Key: 1= Strongly Agree, 2= Agree, 3= Not sure, 4= Disagree & 5= Strongly Disagree

Freq = frequency, % = percent

The findings in Table 4.5 suggest that the respondents strongly agreed ( $\chi^2 = 175$ ,  $P \leq 0.001$ ) that the organization structure of the bank is designed in a manner to support controls internally. The findings also asserts that the respondents strongly agreed ( $\chi^2 = 188.3$ ,  $P \leq 0.001$ ) that bank's policies supports use of internal control components in risk management. The findings also show majority of the respondents agreed strongly ( $\chi^2 = 177$ ,  $P \leq 0.001$ ) that bank's ethical considerations are structured in a manner that supports controls internally. The findings also established that the respondents agreed strongly ( $\chi^2 = 258$ ,  $P \leq 0.001$ ) that management philosophy advocates the use of internal controls within the organization. It supports the assertion

by Whittington and Pany, that control environment is the foundation for all other components of internal control. Management's commitment to the operations of the internal control system is also supported by Verschoor (1999), where he notes that "Internal control systems not only contribute to managerial effectiveness but are also important duties of the corporate boards of directors". Therefore management commitment to the operations of the system is a fulfillment of their obligation as highlighted by Verschoor (1999).

#### **4.3.1 Internal Control Measures**

The study sought to assess the effect of internal control measures on the risk management of commercial banks in Nakuru town. The respondents were asked to provide their rating concerning internal control measures. The responses are presented in Table 4.6.

**Table 4.6 Internal Control Measures**

Statement	SA Freq (%)	A Freq (%)	N Freq (%)	D Freq (%)	SD Freq (%)	X <sub>2</sub>	P- Value
Organization's risks can be managed by effective internal control measures.	32(61.4)	13(25)	-	3(5.7)	4(7.6)	236.92	0.0001
The internal control measures within our bank are well documented and communicated.	28(53.9)	12(23)	5(9.6)	3(5.7)	4(7.6)	220.15	0.0001
The internal control measures within our bank are well understood.	25(48)	11(21.1)	1(1.9)	2(3.8)	13(25)	207.39	0.0001
Our bank encourages and provides resources to staff to undertake relevant training on internal control measures.	30(57.6)	20(38.4)	-	-	2(3.8)	225.24	0.0001
Our bank's internal control measures are sufficient in managing risk within your organization.	17(32.6)	23(44.2)	-	2(3.8)	10(19)	244.68	0.0001
Aims and objectives of our bank are contained in documented statements and are communicated to management and staff.	10(19.2)	19(36.5)	8(15.3)	11(21.1)	4(7.6)	178.129	0.0001

Key: 1= Strongly Agree, 2= Agree, 3= Not sure, 4= Disagree & 5= Strongly Disagree

Freq = frequency, % = percent

The findings in Table 4.6 suggest that the respondents strongly agreed ( $\chi^2 = 236$ ,  $P \leq 0.001$ ) that Organization's risks can be managed by effective internal control measures. The findings also reveals that the respondents strongly agreed ( $\chi^2 = 220$ ,  $P \leq 0.001$ ) that the internal control measures within our bank are well documented and communicated. The findings also show majority of the respondents agreed strongly

( $\chi^2 = 207, P \leq 0.001$ ) that the internal control measures within our bank are well understood. The findings reveal that the respondents strongly agreed, ( $\chi^2 = 225, P \leq 0.001$ ) that banks encourages and provides resources to staff to undertake relevant training on internal control measures. The findings also show that respondents agreed ( $\chi^2 = 244, P \leq 0.001$ ) that their bank internal control measures are sufficient in managing risk within your organization. The respondents agreed ( $\chi^2 = 177, P \leq 0.001$ ) that aims and objectives of our bank are contained in documented statements and are communicated to management and staff.

This therefore confirms Whittington and Pany (2001)'s suggestion that "internal auditing is performed as part of the monitoring activity of an organization." This is also in line with Gupta (2001) assertion that "the objective of internal audit is to assist members of the organization in the effective discharge of their responsibilities."

#### **4.3.2 Internal Control Procedures**

The study sought to assess the effect of internal control procedures on the risk management of commercial banks in Nakuru town. The respondents were asked to rate the internal control measures. The responses are presented in Table 4.7.

**Table 4.7 Internal Control Procedures**

<b>Statement</b>	<b>SA Freq (%)</b>	<b>A Freq (%)</b>	<b>N Freq (%)</b>	<b>D Freq (%)</b>	<b>SD Freq (%)</b>	<b>X<sub>2</sub></b>	<b>P- Value</b>
Well-structured internal control procedures helps in risk mitigation.	28(53.8)	20(38.4)	3(5.7)	1(1.9)	-	246.4	0.0001
All internal control procedures are well known to all staff members in our bank.	12(23)	12(23)	7(13.4)	12(23)	9(17.3)	249.8	0.0001
Our bank's internal control procedures on risk management are made known to all staff.	19(36.5)	15(28.8)	-	10(19.2)	8(15.3)	163.1	0.0001
The risks our bank faces are regularly assessed in terms of occurrence likelihood.	12(23)	10(19.2)	2(3.8)	14(26.9)	14(26.9)	266.7	0.0001
Our bank uses comprehensive and systematic procedures in identification of its risks relating to each of its declared aims and objectives.	10(19.2)	15(28.8)	4(7.6)	12(23)	11(21.6)	206.4	0.0001
In the last 2 years the level of risk our bank faced has decreased.	26(50)	20(38.4)	-	-	6(11.5)	119.8	0.0001

Key: 1= Strongly Agree, 2= Agree, 3= Not sure, 4= Disagree & 5= Strongly Disagree

Freq = frequency, % = percent

The findings in Table 4.7 suggest that the respondents strongly agreed ( $\chi^2 = 246$ ,  $P \leq 0.001$ ) that well-structured internal control procedures helps in risk mitigation. The findings also reveal that the respondents strongly agreed ( $\chi^2 = 249$ ,  $P \leq 0.001$ ) that all internal control procedures are well known to all staff. The findings also show majority of the respondents agreed strongly ( $\chi^2 = 163$ ,  $P \leq 0.001$ ) that their bank's

internal control procedures on risk management are made known to all the staff. The findings also show that respondents agreed ( $\chi^2 = 266, P \leq 0.001$ ) that the risks their bank faces are regularly assessed in terms of occurrence likelihood. The respondents agreed ( $\chi^2 = 206, P \leq 0.001$ ) that their banks use comprehensive and systematic procedures in identification of its risks relating to each of its declared aims and objectives. The respondents strongly agree ( $\chi^2 = 119, P \leq 0.001$ ) that in the last 2 years the level of risk their bank faced have decreased. This finding therefore seems to suggest a failure by the internal audit function in its monitoring role alluded to by Whittington and Pany (2001).

#### **4.4 Inferential Statistics**

Inferential statistics allows the researcher to draw conclusions about the population on the basis of data obtained from samples.

Pearson correlation coefficient and regression coefficients analysis results are presented in this section to evaluate the relationship between the dependent and independent variable.

##### **4.4.1 Correlation Analysis**

Correlation shows the degree of relationship between two variables. After generating the principal components of each variable of the study, the researcher came up with the main variables of the study which are internal control components, internal control measures and internal control procedures. After generating these main variables, correlation analysis was conducted to establish the relationships between them. Pearson's Correlation Coefficient was carried out and the results obtained are presented in the Table 4.9.

**Table 4.9 Summary of Correlations Results**

		Internal control components	Internal control measures	Internal control procedures	Risk M ngt
<b>Internal control components.</b>	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	52			
<b>Internal control measures.</b>	Pearson Correlation	.702 **	1		
	Sig. (2-tailed)	.000			
	N	52	52		
<b>Internal control procedures.</b>	Pearson Correlation	.711 **	.705 **	1	
	Sig. (2-tailed)	.000	.000		
	N	52	52	52	
<b>Risk M anagement</b>	Pearson Correlation	.720 **	.743 **	.701 **	1
	Sig. (2-tailed)	.000	.000	.000	
	N	52	52	52	52

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

Source: Research data, 2015

A correlation analysis to determine whether Internal control components had an influence on Risk Management shows a relationship exists ( $r=0.720$ ,  $\alpha = 0.000$ ). This suggests that Internal control components to the banks was important in mitigating risk management in commercial banks in Nakuru town. This study concurs with Goodwin-Stewart & Kent (2006), using a sample of Australian listed companies, showed that the existence of an Internal Control System is positively associated with firm size and commitment to risk management.

The correlation analysis to determine whether Internal control measures had an influence on Risk Management shows a relationship exists ( $r = 0.743$   $\alpha = 0.000$ ). This implies that focus internal control measures was significant to Risk Management in commercial banks in Nakuru town. Katuntu (2005), in his study asserted that lack of or weak ICSS measures are therefore an indicator of poor financial performance

The study also sought to determine whether Internal control procedures had an influence on Risk Management shows a relationship exists ( $r = 0.701$   $\alpha = 0.000$ ). The results show that internal control procedures was a significant factor in risk management in commercial banks in Nakuru town. Dwivedi (2002), also found out

that, the ability of a firm to survive in business is an indicator of good financial performance since proper procedures are already in effect.

The results therefore indicated that internal control measures exhibited the strongest association with risk management in commercial banks in Nakuru town followed by internal control components and lastly internal control procedures.

It can therefore be concluded that all the variables were significant to the study problem although the degrees of influence varied.

#### 4.4.2 Regression Analysis

Regression analysis was used to produce a best fit line to predict independent variables from the dependent variable. This analysis was used to determine how the independent variables influenced the dependent variable, to what extent each independent variable affected the dependent variable and which of those factors are significant. The results obtained are shown by Table 4.10.

**Table 4.10 Multiple Linear Regression Analysis Model Summary**

**Model Fitness**

Model fitness	R	R <sup>2</sup>	Adjusted r <sup>2</sup>	Std. Error of the Estimate
1	0.936 <sup>a</sup>	0.876	0.874	.28202

a. Predictors: (Constant), Risk Management

b. Predictors: (Constant), Measures, Components, Procedures

The results in Table 4.10 present the value for R, which is the model correlation coefficient, was  $r = .936$  while adjusted  $r^2$  was 0.87 implying that the regression model was able to explain 87% of the variability when all the variables are combined.



**Table 4.10b : Summary of Anova Table**

Source Of Difference	Sum of Squares	df	Mean Square	F	Sig.
Between groups	127.515	3	31.879	398.4875	.000 <sup>b</sup>
Within groups	18.054	48	.080		
Total	145.569	51			

The Anova results of Table 4.10b indicates that there is a significant difference between the mean of factors influencing value when regressed against risk management in Commercial Bank in Nakuru Town.

**Table 4.11 Regression Results**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.167	.042		3.992	.000		
Internal Control Components	.407	.092	.485	4.408	.000	.806	1.241
Internal Control Measures	.172	.058	.189	2.982	.003	.875	1.143
Internal Control Procedures	.065	.075	.08	.867	.387	.077	1.298

The findings showed that Internal Control Components ( $\beta=.407$ ,  $p= 0.000$ ) significantly affected risk management. The findings also indicated a significant relationship between Internal Control Measures ( $\beta=.172$ ,  $p= 0.003$ ). However the results show that Internal Control procedures ( $\beta=.065$ ,  $p= 0.387$ ) does not significantly influence risk management in commercial banks in Nakuru town.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Whereby Y = Risk Management

$\beta_0$  = Constant

$\beta_1, \beta_2, \beta_3, \beta_4$  = Parameters of the model

$X_1$  = Internal Control Components (ICC)

$X_2$  = Internal Control Measures (ICM)

$X_3$  = Internal Control procedures (ICP)

$\varepsilon$  = Error term

$$Y = 0.167 + 0.407ICC + 0.172ICM + 0.065ICP + 0.042$$

#### 4.4.3 Hypotheses Testing

In this section, the research hypotheses are tested and implications discussed.

**H<sub>01</sub>:** Internal control components have no significant effect on risk management in commercial banks.

**H<sub>02</sub>:** Internal control measures have no significant effect on risk management.

**H<sub>03</sub>:** Internal control procedures have no significant effect on risk management.

##### 4.4.3.1 Internal control components have no significant effect on risk management in commercial banks

Using a 5% significance level, regression results showed that Internal control components does significantly risk management ( $\beta=0.407$ ;  $p=0.000$ ). The implication of this is that internal control components did influence risk management in commercial banks thus leading to the rejection of the first null hypothesis H<sub>01</sub>. The null hypothesis is therefore rejected and a conclusion made that “Internal control components have no significant effect on risk management in commercial banks” is drawn. The study agrees with Walker et al. (2002), that an internal control components initiative cannot succeed without strong support in the organization from senior management, and Beasley et al. (2005), find management support to be associated with the extent of ICC components implementation. Kleffner et al. (2003), find that the board of directors is becoming more involved in risk management activities, and the board’s influence is related to ICC adoption. It is expected that audit committee and top management demand for internal audit involvement in ICC to increase internal audit’s ICC related activities.

#### **4.4.3.2 Internal control measures have no significant effect on risk management**

Regression results showed that Internal control measures did significantly influence risk management ( $\beta = 0.172$ ;  $p = 0.003$ ). The implication of this is that internal control measures did influence risk management in commercial banks. The null hypothesis ( $H_{02}$ ) is therefore rejected and a conclusion made that “Internal control measures have no significant effect on risk management” is drawn. These results concurs with the study by Goodwin-Stewart & Kent (2006), using a sample of Australian listed companies, showed that the existence of an Internal Control measures is positively associated with firm size and commitment to risk management. Control activities should be designed as an integral part of the organisation, taking into consideration its objectives, the risks to their achievement, and inter-relatedness of control elements.

#### **4.4.3.3 Internal control procedures have no significant effect on risk management**

Regression results also showed that internal control procedures did not significantly influence risk management ( $\beta = 0.065$ ;  $p \text{ value} = 0.387$ ). The implication of this is that internal control procedures did not influence risk management in commercial banks thus leading to the acceptance of the third null hypothesis  $H_{03}$ . The alternative hypothesis is therefore accepted and a conclusion made that “Internal control procedures have no significant effect on risk management” is accepted. The results seems to agree with Ray and Pany (2001)’s belief that “control activities are policies and procedures that help ensure that management directives are carried out.” The study identified that the scope and frequency of separate procedures will depend primarily on an assessment of risks and the effectiveness of ongoing risk management. Internal control efficiencies should be reported upstream, with serious matters reported to top management and the Board.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

Based on the results obtained from the study, major findings, conclusions and recommendations are presented in this chapter. Furthermore, suggestions for further research are also given. The overall objective of this study was to evaluate the effects of internal control systems on risk management in commercial banks. The specific objectives were to assess the effect of internal control components on the risk management of commercial banks, to assess the effect of internal control measures on risk management of commercial banks and to investigate the effect of internal control procedures on risk management of commercial banks.

#### 5.2 Summary of Findings

The findings show that all variables combined can explain approximately 87% of the variations in internal control systems in the Commercial Banks in Nakuru town while 13% may be attributed to other factors not explained by the variables.

The results confirm that internal control systems are directly affected by internal control components, internal control measures and internal control procedures. The risk management function bears some of the responsibility to develop an appropriate risk awareness culture within organization. This goes beyond defining and monitoring the elements of culture, determining new initiatives and directions intended to promote the desired characteristics of the culture. It has to do with the risk management area's own behaviors. Those within risk management department, particularly in relationship/credit and operation departments, need to be furnished with continuous training to ensure compliance to the systems. The results indicate that the risk management strategy gets the most business value from corporate governance and risk management. Developing proper risk management infrastructure would appreciate the return on value from information for financial risk investments for the stakeholders.

### **5.2.1 Effect of internal control components on the risk management of commercial banks**

Amongst the many factors which accounted for the proper adherence to risk management was the structure and components put in place in the banks. The internal environment, which set the basis for how risk was viewed and addressed by the bank personnel's, including risk management philosophy, risk appetite, ethical values, integrity and the environment within which an organization operates was incorporated. Policies designed to support the achievement of an organisation's objectives and the management of its risks should be established, communicated and practiced so that people understand what is expected of them and the scope of their freedom to act. The decisions and actions of different parts of the organisation should be coordinated. The internal controls components should be established to ensure that assets are secured and management policies are being followed to the letter with a view to attaining the set goals for the organization. These components were the responsibility of the management; who designed an appropriate system of internal control for the organization in mitigating the risk in the banks.

### **5.2.2 Effect of internal control measures on risk management of commercial banks**

From this study, the preeminent importance of measures was to ensure complete and accurate accounting for transactions. It was further proven that control self-assessment and hierarchical reporting has been established which provides for a documented and auditable trail of accountability. Appropriate authorization limits for transactions that reasonably limit the company's exposures and due measures to ensure the reliability of data processing and the integrity of the information generated. Controls that limit exposure to loss of assets/records or to fraud (e.g. physical controls, segregation of duties) should also be enforced and continually checked. Checks which provide effective supervision of the control activities are evinced. Planned corrective actions should be independently monitored for timely completion.

### **5.2.3 Effect of internal control procedures on risk management of commercial banks**

From the study results, it was established that proper mechanisms have been put in place to ensure accuracy and reliability of the accounting systems. It aided in measuring levels of compliance, reliability and effectiveness of the proposed procedures thus ensuring continued reliability of accounting systems. Information and communication processes and pertinent information must be identified, captured and communicated in a form and time-frame that enables people to carry out their responsibilities. Information systems produce reports, containing operational, financial and compliance-related information, that make it possible to run and control the business. They deal not only with internally generated data, but also information about external events, activities and conditions necessary to make informed business decision-making and external reporting.

### **5.3 Conclusions**

The results evoked from this study indicate that banking institutions striving for internal control systems on mitigating risks through components, measures and procedures. Most Banks acknowledge the importance of internal control systems though it is a relatively dynamic concept in the banking industry. An effective internal control system therefore relies mainly on the incorporation of these factors that influence risk management in a significant way. The study revealed that risk management and internal control systems exist in the company and that they are being complied with. Therefore the main hypothesis for this research is accepted. As a result of the good risk management and internal control systems put in place by the company, the company was able to do fairly well (compared to the previous years) despite the financial scandals and crisis of recent years.

It is also important to note that even though it is stated that most banks work within Risk management and internal control is based on the principles in the framework of COSO, all the elements are not implemented. By comparing theory with empirical work from the company's annual reports, it appears that the company adopts and adjusts elements and principles that best suit the operations of the company.

#### **5.4 Recommendations**

The study recommends that attention be given to the strong influences on the internal control systems of commercial banks. The strategic objectives and risk management policy of the company must be determined at the highest level in the organization while senior management must be responsible for the policies to be incorporated into daily operations and to dedicate the necessary resources to achieve this.

A risk management department must be set up to ensure the open position is followed up and compliance of the positions and strategies with the policies and procedures. The departments must also determine other risks related to the activity, e.g. credit risk. There also should be internal and external reporting (financial statements) which must follow best practice with frequent and detailed disclosures. There should be regular stress testing on strategy and risk measurement models prior to trading in new products, a formal analysis must be conducted and documented on the risk profile of the product, the appropriateness of its use, the ability to handle the new product operationally, including the accounting treatment.

#### **5.5 Suggestions for further research**

In the conclusion of this study, the author posits that the management of risk needs to be a continuous process, lasting the lifetime of any organizational initiative, be it a major activity or project, from its initiation, through its development and evolution, to its completion or termination. Thus further research should be undertaken to study the influence of information technology on the effectiveness on internal control system processes.

Further studies should also be attempted in assessing the risk management and internal control systems in microfinances institutions'.

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**APPENDIX I: INTRODUCTORY LETTER TO THE RESPONDENT**

Meera B. Shah

P.O Box 401-20100,

Nakuru

Dear Sir / Madam ,

**RE: REQUEST FOR DATA COLLECTION**

I am a postgraduate student in the School Of Business and Economics, Kabarak University pursuing Master of Business Administration Degree. Following my research project I am carrying out a research on effects of internal control systems on risk management in commercial banks in Nakuru town

I hereby kindly request you to fill the questionnaire attached to this introductory letter to aid my study as well as to fulfill the requirement of Master of Business Administration, (Strategic Management option)

I have selected your institution as the main target population. Details of each section in the questionnaire are specified therein.

All information that you provide will be treated with utmost confidentiality for purely academic purposes.

Yours faithfully,

Meera B. Shah

(Researcher).



**APPENDIX II: QUESTIONNAIRE**

This is a master's research work being undertaken for Kabarak University Business School with the aim of deepening my understanding of risk management and internal control systems that exist in commercial banks in Nakuru Town. Any information given will be kept confidential. Thank you for your co-operation.

**SECTION ONE**

**GENERAL INFORMATION**

- 1. Name of the Bank .....
- 2. Department .....
- 3. Gender: Male
- Female
  
- 5. Highest level of education:
  - Masters
  - Degree
  - Diploma
  - Certificate
  
- 6. How long have you worked in this bank? .....
- 7. What is your current level of management .....

**SECTION TWO**

*Please show your level of agreement to indicate the extent to which the following statements apply to your institution by ticking your response corresponding to the number in the scale given above in box against statement.*

**PART 1: INTERNAL CONTROL COMPONENTS**

**Key: 5 = Strongly Agree 4 = Agree 3 = Not sure 2 = Disagree 1= Strongly Disagree**

No.	Internal Control Components Statements	1	2	3	4	5
1	The organization structure of our bank is designed in a manner to support controls internally.					
2	Our bank's policies supports use of internal control components in risk management.					
3	Our bank's ethical considerations are structured in a manner that supports controls internally.					
4	Management philosophy advocates the use of internal controls within the organization.					

**PART 2: INTERNAL CONTROL MEASURES**

	Internal Control Measures Statements	1	2	3	4	5
1	Organization's risks can be managed by effective internal control measures.					
2	The internal control measures within our bank are well documented and communicated.					
3	The internal control measures within our bank are well understood.					
4	Our bank encourages and provides resources to staff to undertake relevant training on internal control measures.					
5	Our bank's internal control measures are sufficient in managing risk within our organization.					
6	Aims and objectives of our bank are contained in documented statements and are communicated to management and staff.					

**PART 3: INTERNAL CONTROL PROCEDURES**

No.	Internal Control Procedures Statements	1	2	3	4	5
1	Well-structured internal control procedures helps in risk mitigation.					
2	All internal control procedures are well known to all staff members in our bank.					
3	Our bank's internal control procedures on risk management are made known to all staff.					
4	The risks our bank faces are regularly assessed in terms of occurrence likelihood.					
5	Our bank uses comprehensive and systematic procedures in identification of its risks relating to each of its declared aims and objectives.					
6	In the last 2 years the level of risk our bank faced has decreased.					

**PART 4: RISK MANAGEMENT**

**Rank the following items according to the scale provided;**

**1 = Strongly Agree, 2 = Agree, 3 = Neutral/Not sure, 4 = Disagree, 5 = Strongly Disagree**

	Risk Management Variables	1	2	3	4	5
1.	The Board/Management recognizes all the risks inherent in the bank's portfolio.					
2.	There exists elaborate policies, procedures and structures to guide management of risks at all levels of management.					
3.	Our credit policies are commensurate with overall risk management policy					
4.	Our bank has a credit risk management committee to oversee the credit risk management function.					
5.	Credit risks exposed to are controlled, monitored and regularly reported for necessary action.					
6.	Our bank has a market risk management committee to ensure all market risks are managed.					
7.	The board/management receives regular reports on market risk measurement.					
8.	Our bank has a clear, comprehensive and well documented set of policies and procedures to manage market risks.					

9.	Our bank ensures that the responsibilities of front, middle and back offices are clearly segregated and do not rest with the same person.						
10.	Senior management have developed an operational risk management policy; capable of identifying and assessing the operational risk inherent in all material products, activities, processes and systems, and dealing with the newly recognized risks arising from changes in market conditions.						
11.	Our bank has a separate function for operational risk management, independent of internal audit.						
12.	The bank has an established asset and liabilities management committee comprising senior management from each key area of operations						

**APPENDIX III: LICENSED COMMERCIAL BANKS IN NAKURU TOWN**

<b>BANK NAME</b>	<b>NUMBER OF BRANCHES</b>
Barclays Bank of Kenya Ltd	2
Kenya Commercial Bank Ltd	2
I&M Bank Ltd	1
Credit Bank Ltd	2
CFC Stanbic Bank Ltd	1
Diamond Trust Bank Ltd	1
Eco Bank Ltd	1
Commercial Bank Of Africa Ltd	1
Oriental Commercial Bank Ltd	1
Standard Chartered Bank Ltd	1
Bank of Baroda (K) Ltd	1
African Banking Corporation	1
Equity Bank	3
Family Bank Ltd	2
Trans-national Bank	1
Prime Bank (Kenya)	1
NIC Bank	1
National Bank of Kenya	1
Bank of Africa	1
Chase Bank Kenya	1
Consolidated Bank of Kenya	1
Cooperative Bank of Kenya	2
Equatorial Commercial Bank	1
Fidelity Commercial Bank	1
First Community Bank	1
Guardian Bank	1
Gulf African Bank	1
Housing Finance Company of Kenya	1
Imperial Bank Kenya	1

**Source: Central Bank of Kenya website September 2015**



## KABARAK UNIVERSITY

OFFICE OF THE DIRECTOR - NAKURU TOWN CAMPUS

P.O. Box 32701-Nakuru. Tel:051-2215549 Fax 051-343012, Email - nakuru@wncampus@kabarak.ac.ke

19<sup>TH</sup> OCTOBER, 2015

TO WHOM IT MAY CONCERN

Dear Sir/Madam,


**RE: REQUEST FOR STUDENT RESEARCH STUDY- MEERA BILMAL ROY SHAH-  
GMB/NE/0696/05/13**

The above named is a student at Kabarak University, Nakuru Town Campus, pursuing Masters Degree in **Business Administration-Strategic Management** Option. As part of her coursework, she is required to undertake an independent primary research in her area of specialization.

The purpose of this letter is to introduce her to you and request you to allow her to undertake her study in your organization.

Students are advised to ensure that all data and information from the client is treated with utmost confidentiality and only used for academic purposes, unless otherwise stated.

Thank you,

  
Kabarak University  
Nakuru Town Campus  
Private Bag 20167  
Nakuru  
DR. MAINA WAINANJO

**DIRECTOR - NAKURU TOWN CAMPUS**

***Kabarak University Moral Code***

"We purpose at all times and in all places, to set apart in one's heart, Jesus as Lord" 1 Pet 3:15