# A SURVEY OF RISK MANAGEMENT PRACTICES ADOPTED BY BANKING INSTITUTIONS IN KENYA

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#### DECLARATION

I hereby declare that the work in the dissertation is my original research and neither whole nor part has been submitted as a credit for academic qualification to any individual or learning institution.

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#### DEDICATION

This dissertation is dedicated to my charming wife for her resolute encouragement, putting up with my busy schedule and making me the most special person in her life.

Much appreciation to my two sons, Livingstone Manoahs and Livingstone Mathews who always cheer, challenge, tease and have fun with me. They keep me in some form of shape by participating in 'compound racing' and playing soccer together.

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# TABLE OF CONTENTS

Delegie	
Declaration	
Dedicationi	
Acknowledgementi	
Table of Contents	V
List of Tablesv	i
List of Abbreviations	i
ABSTRACTvii	
CHAPTER ONE	l
1.0 INTRODUCTION	)
1.2 Enterprise Risk Management Programme	
1.3 Elements of Sound Risk Management Systems	
1.4 Brief Background of the Kenyan Banking Sector	
1.5 Statement of the Problem	
1.6 Objectives	5
1.7 Importance of the study	5
CHAPTER TWO	8
2 O LITER ATURE REVIEW	0
2.0 LITERATURE REVIEW	
2.1 Introduction	
2.2 Theoretical Framework of Risk Management	
2.3 Basle Committee on Banking Supervision	
2.4 Risk Management Systems	9
2.5 Prudential Guidelines on Risk Management	2
2.6 Empirical Studies on Risk Management	3
CHAPTER THREE	
3.0 METHODOLOGY2	
3.1 Introduction	
3.2 Research Design2	7
3.3 Population and Sample	7
3.4 Data Collection	)
3.5 Data Analysis30	)
CHAPTER FOUR3	1
4.0 DATA ANALYSIS, PRESENTATION AND FINDINGS	1
CHAPTER FIVE	
5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	8
REFERENCES	
Appendix I : - Introduction Letter	
Appendix II: - Risk Management Questionnaire	
Appendix III: - List of Banks in Kenya	1

# List of Tables

Table 1	-	Importance of risk management
Table 2	-	Link between strategic objectives and risk management
Table 3	-	Responsibility of risk management
Table 4	-	Level of understanding of Risk Management
Table 5	-	Adequacy of resource allocation
Table 6	-	Level of training on risk management
Table 7	-	Sources of risk
Table 8	-	Use of computer software for risk management
Table 9	-	Tools applied for risk identification
Table 10	-	Risk management and improved performance

#### List of Abbreviations

ALM ..... Assets and Liabilities Management

ALCO ..... Assets and Liabilities Committee

BAC ...... Board Audit Committee

BCC ...... Board Credit Committee

BCBS ...... Basel Committee on Banking Supervision

CBK ..... Central Bank of Kenya

CEO ..... Chief Executive Officer

ERMP ..... Enterprise Risk Management Programme

MIS ...... Management Information Systems

RMG ...... Risk Management Guidelines

RMC ...... Risk Management Committee

SBP ...... State Bank of Pakistan

#### ABSTRACT

Financial risk in a banking organization has been described as possibility that the outcome of an action or event could bring up adverse impacts on the financial institution's capital or earnings. Since risk taking is an inherent element of banking and indeed profits are in part the reward for successful risk taking, risk management has become a critical function in organizations. Many institutions have adopted Enterprise-wide Risk management framework to have holistic approach of combating risks that threaten their performance especially during tough times.

The main objective of the study was to conduct a survey of risk management practices adopted by commercial banks in Kenya, Identify the types of risks faced and establish the various tools applied by institutions to identify and mitigate against business risks. The population comprised of all the 45 commercial banks operating in Kenya as at 31<sup>st</sup> December 2009 and the study was based on descriptive research design where a combination of quantitative and qualitative data was obtained using self-administered questionnaires.

The study reveals that risk management in Kenya is considered a vital factor for organizations to meet their desired goals and objectives. Many of the institutions sampled strongly agreed that effective risk management could improve achievement of organizational goals and mirrors the Central Bank of Kenya (CBK) Annual report (2008) which observed that risk management had taken an increasingly pivotal role in the banking sector in view of enhanced customer expectations, technological advancements, improved regulatory framework and regional expansion by banks.

Despite the critical importance of risk management in determining the overall success of organizations, risk management is still evolving in Kenya and the major challenges faced by banking institutions include inadequate capital resources, staff competencies and system limitations. There is need for banking institutions to allocate sufficient resources to strengthen risk management functions and further research is required to establish effective risk oversight methodologies.

#### CHAPTER ONE

#### INTRODUCTION

#### 1.1 Background

The term 'risk' in a banking organization is regarded as the possibility that the outcome of an action or event could bring up adverse impacts on the financial institution's capital or earnings. Such outcomes could result in direct loss of earnings or capital and may result in imposition of constraints on the institution's ability to meet its business objectives (State Bank of Pakistan [SBP] Risk Management Guidelines, 2000). The study sought to establish the level of importance and steps taken by management of financial institutions to identify, measure, monitor and control the overall levels of risks undertaken.

While the types and degree of risks an organization may be exposed to depend upon a number of factors such as its size, complexity of business activities and volume, the most common risks in financial institutions are Strategic Risk, Credit Risk, Liquidity Risk, Interest Rate Risk, Foreign Exchange Risk, Operational Risk, Reputational Risk and Compliance Risk (Khandelwal, 1997).

According to Allen and Anthony (1997), risk-taking is an inherent element of banking business and indeed profits are in part the reward for successful risk taking in business. Conversely, lack of an effective risk management system, excessive risks or poorly managed risks can lead to losses. Risks are warranted when they are understandable, measurable, controllable and within a financial institution's capacity to readily withstand adverse results. Sound risk management systems enable management to take risks deliberately, reduce risks where appropriate and strive to prepare for a future that cannot be predicted with absolute certainty. Risk management is therefore a discipline at the core of every financial institution and encompasses all activities that affect its risk profile.

#### 1.1.1 Enterprise Risk Management Programme (ERMP)

CBK Guidelines (2006) recognizes the fact that no single risk management system works for all financial institutions. Organizations are therefore expected to develop its own ERMP tailored to its needs and circumstances and should largely cover all identified risks inherent in its business operations. Regardless of the Risk Management Programme (RMP) design, the CBK Guidelines outlines the following as key pillars in a risk management programme:

**Risk identification**; In order to manage risks, risks must first be identified. Almost every product and service offered by an organization has unique risk profile composed of multiple risks. Risk identification is a continuing process and should be understood at both transaction and portfolio level.

Risk Measurement; once the risks associated with a particular activity have been identified, the next step is to measure the significance of each risk in terms of size, duration and probability of adverse occurrences. Accurate and timely measurement of risk is essential for effective risk management systems.

Risk Control; after risk identification and measurement, institutions are required to control significant risks or minimize their adverse consequences through avoidance, placing limits on certain activities or offsetting the risks. Financial institutions establish and communicate control measures through policies, standards and procedures that define responsibility and authority.

Risk Monitoring; This is commonly carried out through establishment of an effective Management Information System (MIS) that accurately identifies and measures risks at the inception of transactions and activities. It is equally important for management to establish an MIS to monitor significant changes in risk profiles. Monitoring systems means developing reporting systems that identify adverse changes in the risk profiles of significant products, services and activities and

monitoring changes in controls that have been put in place to minimize adverse consequences.

#### 1.1.2 Elements of a sound Risk Management System

The SBP Management Guidelines (2000) specifies that the risk management programme of each financial institution should at least contain the following elements of sound risk management system: active board and senior management oversight, adequate policies procedures and limits, adequate risk monitoring and management information systems and adequate internal controls.

It is widely acknowledged that utilization of better risk measures not only provide insights into risks hence better risk mitigation, but also lead to enhanced risk-return decisions, which improves capital deployment.

#### 1.1.3 Brief background of the Kenyan banking sector

As at 31st December 2008 the banking sector comprised 45 institutions, 43 of which were commercial banks, 2 mortgage finance companies and 120 foreign exchange bureaus. Out of the 45 institutions, 33 were locally owned, while the remaining 12 were foreign owned. The locally owned financial institutions comprised 3 banks with significant government shareholding namely; Consolidated Bank of Kenya, Development Bank of Kenya and National Bank of Kenya. 28 of the locally owned banks are privately owned commercial banks and 2 are mortgage finance companies. The foreign owned financial institutions comprise 8 locally incorporated foreign banks and 4 branches of foreign incorporated banks. Of the 42 private banking institutions in the sector, 71% are locally owned and the remaining 29% are foreign owned. All foreign exchange bureaus are private and majority are locally owned (CBK Bank Supervision Annual Reports, 2001-2008).

On a broader perspective, market share analysis reveals three peer groups comprising large, medium and small financial institutions in terms of net assets. Out of the 45

institutions, 14 were in the large peer group with each registering aggregate net assets of over shs 15 billion. The medium peer group comprised 17 institutions with each registering net assets ranging between shs 5 billion and shs 15 billion, while institutions with less than shs 5 billion net assets were 14 in number. Institutions in the large peer group accounted for 83% of the total net assets, 81% of capital and reserves and 92% of profits in the banking sector [CBK Supervision Report, 2008]. The study will focus on the peer group classification to assess the level of implementation of risk management systems.

#### 1.2 Statement of the Problem

Financial disasters in banks, non-bank institutions and in government agencies point out the need for risk management. Some of the reported cases of such bank failures include the Baring's Bank in 1995 where a 235 years old bank was declared bankrupt because of a rogue trader who concealed major deals and the Japanese Daiwa bank where a bond trader in its New York office lost approximately USD 1.1 billion over 11 years through undetected activities. Worldcom was also another company that was caught up in accounting fraud in the realm of USD 11 billion (Jeter, 2006). These incidences have set the stage for the need to focus on effective risk management systems.

In the past, banks relied almost entirely upon internal control mechanism within business lines, supplemented by audit functions to manage business risks. While this approach remains important, the ever changing business environment characterized by globalization and deregulation has presented the financial sector with great challenges, which call for sound management systems capable of early identification, measuring, monitoring and controlling the various financial risks. The Central Bank of Kenya risk management guidelines has categorized these risks under strategic, credit, currency, liquidity, interest rate and operational risks. For instance, a bank dealing in foreign currency will primarily be faced with currency risk and additionally

with liquidity and interest rate risks if it carries an open position. An integrated approach is therefore called for in management of banking risks.

In the period prior to the Kenyan banking crisis of the late 1980s and early 1990s, corporate governance practices and risk management systems were largely inadequate. In many banks, the capacity to appropriately measure, monitor, assess and control risks were insufficient as manifested by weak risk control functions, presence of board members who lacked sufficient skills and knowledge on banking risks and lack of appropriate systems to monitor compliance with policies and limits on a timely basis. Deficiencies in risk management result to weak board oversight and laxity in management leading mainly to imprudent lending practices, excessive investment in risky assets and failure to institute adequate systems to measure, monitor and control risks.

Studies conducted on risk management have mainly dwelt on specific type of risks as opposed to enterprise-wide risk management programme. Yussuf (2005) focused on operational risk management practices and outlines tools used by commercial banks in measuring and controlling of inherent operational risks and risk assessment techniques. A study carried out by Mwirigi (2004) revealed inadequacies in risk management practices in Kenya and inclination by finance institutions on credit risk management techniques. This was prior to formulation and adoption of CBK Guidelines in 2006 that directed licensed financial institutions to institute holistic approaches in risk management programmes.

Enterprise-wide Risk management is therefore vital to assist businesses navigate their way through outcomes that threaten their future and is a strategy that many companies embrace during tough times. Understanding the risk profiles of products and services and balancing them with actions taken to reduce the adverse consequences of risk taking, allows an institution to optimize revenues and maximize the use of capital. The study was focused on establishing the various risk management

practices adopted by commercial banks and the level of importance attached to effective risk management systems.

#### 1.3 Objectives

#### 1.3.1 Broad Objective

The main objective of the study was to conduct a survey of risk management practices adopted by commercial banks in Kenya.

# 1.3.2 Specific Objectives

- 1. Identify the types of risks faced by commercial banks in Kenya.
- Establish the various tools applied by institutions to identify and mitigate against business risks.

# 1.4 Importance of the study

The study is envisaged to benefit the following parties;

# Senior Managers of Banks

The study will provide guidance on the framework of management and identification of business risks within the banking industry.

#### Commercial Banks

The staff members involved in the day-to-day risk management will draw inferences to the study in picking up areas of importance hence enhanced risk-return decisions.

# Regulatory Bodies

The study will provide insight to the Bank Supervision Department of Central Bank and other regulatory authorities charged with the mandate of ensuring proper functioning of the financial system.

#### Management Consultants

The study will benefit management consultants as they develop tools for identification, quantification and management of business risks.

#### Investors

The study will assist investors in assessing level of risk exposure and therefore better risk-return decisions.

#### Academicians

The study will assist scholars in picking areas for further research in areas of risk management. Research into various components of risk management will help unearth information and facilitate research on techniques for effective risk management.

#### CHAPTER TWO

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter contains a review of the theories of risk management and published work on financial risk management obtained from secondary sources of data. The key areas include risk management systems and framework, types of financial risks, Basel Committee on Banking Supervision standards and prudential guidelines on risk management issued by the Central Bank of Kenya.

# 2.2 Theoretical framework of Risk Management

A risk management framework encompasses the scope of risks to be managed, the process/systems and procedures to manage risk and the roles and responsibilities of individuals involved in risk management. An effective framework should be comprehensive enough to capture all risks a bank is exposed to and have flexibility to accommodate any change in business activities.

A valuable and effective risk management framework should include clearly defined risk management policies and procedures covering risk identification, acceptance, measurement, monitoring, reporting and control as well as clearly constituted organizational structure defining clearly roles and responsibilities of individuals involved in risk taking as well as managing it. Banks, in addition to risk management functions for various risk categories may institute a setup that supervises overall risk management at the bank. Such a setup could be in the form of a separate department or bank's Risk Management Committee (RMC) could perform such function. The structure should be such that ensures effective monitoring and control over risks being taken. The individuals responsible for review function (Risk review, internal audit and compliance) should be independent from risk taking units and report directly to board or senior management who are also not involved in risk taking.

A key requirement is an effective management information system that ensures flow of information from operational level to top management and a system to address any exceptions observed. There should be an explicit procedure regarding measures to be taken to address such deviations. Further, the framework should have a mechanism to ensure an ongoing review of systems, policies and procedures for risk management and procedure to adopt changes.

From the foregoing studies and research on risk management, the following stand out as the key considerations in instituting sound risk management framework;

#### 2.2.1 Integration of Risk Management

Risks must not be viewed and assessed in isolation, not only because a single transaction might have a number of risks but also one type of risk can trigger other risks. Since interaction of various risks could result in diminution or increase in risk, the risk management process should recognize and reflect risk interactions in all business activities as appropriate. While assessing and managing risk the management should have an overall view of risks the institution is exposed to. This requires having a structure in place to look at risk interrelationships across the organization.

### 2.2.2 Business Line Accountability

It is vital that the board and senior management of institutions assign people who are dedicated to risk management activities, such as risk review, internal audit etc. It must not be construed that risk management is something to be performed by a few individuals or a department. Business lines are equally responsible for the risks they are taking. Because line personnel, more than anyone else, understand the risks of the business, such a lack of accountability can lead to problems.

#### 2.2.3 Risk Evaluation/Measurement

Until and unless risks are assessed and measured it will not be possible to control risks. Further a true assessment of risk gives management a clear view of

institution's standing and helps in deciding future action plan. To adequately capture institutions risk exposure, risk measurement should represent aggregate exposure of institution both risk type and business line and encompass short run as well as long run impact on institution. To the maximum possible extent institutions should establish systems / models that quantify their risk profile, however, in some risk categories such as operational risk, quantification is quite difficult and complex. Wherever it is not possible to quantify risks, qualitative measures should be adopted to capture those risks.

Whilst quantitative measurement systems support effective decision-making, better measurement does not obviate the need for well-informed, qualitative judgment. Consequently the importance of staff having relevant knowledge and expertise cannot be undermined. Finally any risk measurement framework, especially those which employ quantitative techniques/model, is only as good as its underlying assumptions, the rigor and robustness of its analytical methodologies, the controls surrounding data inputs and its appropriate application.

# 2.2.4 Independent review

One of the most important aspects which has featured prominently in risk management philosophy is to make sure that those who take or accept risk on behalf of the institution are not the ones who measure, monitor and evaluate the risks. Again the managerial structure and hierarchy of risk review function may vary across banks depending upon their size and nature of the business, the key is independence. To be effective the review functions should have sufficient authority, expertise and corporate stature so that the identification and reporting of their findings could be accomplished without any hindrance. The findings of their reviews should be reported to business units, Senior Management and, where appropriate, the Board.

# 2.2.5 Contingency planning

Another key consideration which has been emphasized is instituting mechanisms to identify stress situations ahead of time and plans to deal with such unusual situations

in a timely and effective manner. Stress situations to which this principle applies include all risks of all types. For instance contingency planning activities include disaster recovery planning, public relations damage control, litigation strategy and responding to regulatory criticism. Contingency plans should be reviewed regularly to ensure they encompass reasonably probable events that could impact the organization. Plans should be tested as to the appropriateness of responses, escalation and communication channels and the impact on other parts of the institution.

#### 2.3 Business Risks

The past decade has seen dramatic losses in the banking industry. Firms that had been performing well suddenly announced large losses due to credit exposures that turned sour, interest rate positions taken, or derivative exposures that may or may not have been assumed to hedge balance sheet risk. In response to this, commercial banks have almost universally embarked upon an upgrading of their risk management and control systems (Santomero, 1984).

In recognition of the banking industry's vulnerability to financial risk, various studies carried out on financial risk management processes indicate that even the best practice employed within the banking industry is not good enough to address the array of risks facing organizations, hence need to design and tailor risk management practices to business settings. According to Rose (1997) banks are faced with various risks including market risk which is the risk that the market price (value) of an asset will decline resulting in a capital loss when sold.

Commercial banks are in the risk business. In the process of providing financial services, they assume various kinds of financial risks. Over the last decade, understanding of the place of commercial banks within the financial sector has improved substantially and market participants seek the services of these financial institutions because of their ability to provide market knowledge, transaction



efficiency and funding capability. In performing these roles they generally act as a principal in the transaction. As such, they use their own balance sheet to facilitate the transaction and to absorb the risks associated with it. Risk management is therefore fundamental for institutions to achieve better efficiency and effectiveness as a wider strategy to meet set goals and objectives.

# 2.4 Risk Management

Risk management is emerging as a significant issue especially in the fast-growing monetary and capital markets. Doering (2003) suggests that good risk management is a decisive competitive advantage as it helps to maintain stability and continuity and supports revenue and earnings growth in commercial Banks. While not avoidable, risk is manageable, and as a matter of fact most banks live reasonably well by incurring risks especially "intelligent risks" (Jorion, 2001).

Risk may be thought of as a concept that describes uncertainty in achieving goals. Financial risk in a banking organization can be described as possibility that the outcome of an action or event could bring up adverse impacts. Such outcomes could either result in a direct loss of earnings / capital or may result in imposition of constraints on bank's ability to meet its business objectives. Such constraints pose a risk as these could hinder a bank's ability to conduct its ongoing business or to take benefit of opportunities to enhance its business. Regardless of the sophistication of the measures, banks often distinguish between expected and unexpected losses [SBP Risk Management Guidelines, 2000].

Expected losses are those that the bank knows with reasonable certainty will occur and are typically reserved for in some manner. Unexpected losses are those associated with unforeseen events (e.g. losses experienced by banks in the aftermath of nuclear tests, Losses due to a sudden down turn in economy or falling interest rates). Banks rely on their capital as a buffer to absorb such losses [State Bank of Pakistan Risk Management Guidelines, 2000].

The growth in volume and complexity of financial markets, specially derivatives markets, over the past few years, together with a handful of notorious financial disasters arising from ill-conceived derivatives transactions, have increased concern over the risk introduced by derivatives and other complex instruments into the global marketplace. At individual firms' level, this poses an increasing threat to their ability to keep control over their exposure to risk in a diverse environment. At an aggregate level, there has been some fears that default by one firm could spread out to others in the same country or even cross-borders, and become a financial crisis of huge proportions. This is a major concern not only for regulators, but also for markets participants [Gertler, 1988].

In this context, risk management has become an essential part of firms' and regulators' activities. A risk management system is a valuable instrument for assessing the exposure to risk that participants in the financial sector in general are subject to. Using such systems, managers can measure risk across markets in terms of their potential impact on profit and loss, quantify capital allocation to markets and dealers, establish meaningful risk limits and supervise performance.

Risk systems also provide a measure of the amount of capital necessary to provide a cushion against potential future losses, a vital element for both managers and regulators. The financial marketplace strength, as a whole, ultimately depends upon individual firms' ability to cover unexpected losses with capital reserves. Even firms using the best risk management systems are statistically subject to losses, and then a proper capital cushion is essential. Not surprisingly, setting capital adequacy standards is at the core of regulators' responsibilities, together with efficient surveillance and supervision of market participants.

# 2.5 Types of Financial Risks

Franklin and Anthony (1996) observe that the environment in which we operate is a complete set of relationships and interactions amongst many an element and the very

purpose of the existence of an organization are to create value by interacting with its environment. Resources such as human, financial, intangible assets are converted into services to create value that cater to the needs of the constituents and society at large. In such a scenario, risk traces its origin to the uncertainty of an unexpected change in the environment. Managing risk in short means managing the organization. An organization can be termed risk fit if it has sensitivity to detect risk, has flexibility to respond to risk and the capability to mitigate risk in terms of resources.

Globalization and technology have brought about mind-boggling changes in both domestic and international markets. In the past, the single key recognized risk was credit risk. The changes embracing the financial world have resulted in many more new risks being added to the galaxy of risks. According to Khandelwal (1997), the following are the key risks inherent in banking organizations;

Credit	Technology	Capital	Tax	
Political	Liquidity	Accounting	Modeling	
Currency	Interest RAte	Rollover	Bankruptcy	
Personnel	Reputational	MArket	Volatility	
Hedging	Knowledge	Data	Equity	
Basis	Legislative	Concentration	Leverage	

CBK Risk Management Guidelines identifies the following as the broad risk categories; Strategic Risk, Credit Risk, Liquidity Risk, Market Risk(Incorporates Interest Rate, Foreign Exchange and Price Risk), Operational Risk, Reputational Risk and Regulatory Risk.

# 2.5.1 Strategic Risk

Strategic risk is defined as the current and prospective impact on earnings or capital arising from adverse business decisions, improper implementation of decisions, or lack of responsiveness to industry changes. The Board of Directors of an institution retains the overall responsibility for strategic risk management. The senior management, in turn have a duty to ensure there is an effective strategic risk

change in asset value due to the changes in perceived ability of counter parties to meet their contractual obligations.

Management of Market risk has received increasing attention over the world from managers and supervisors with the risk in trading activities. Market risk refers to the risk that changes in financial market prices and rates will alter the value of bank's positions (Gregory, 1996). The sub-class of market includes interest rate risk, currency risk, basis risk, commodity risk and equity risk (Stulz, 1984). Measuring of market risk in trading portfolios is done through summary measure of Value at Risk (VaR) models, where these models are designed to estimate for a given trading portfolio, the maximum loss that a bank could incur, over a specific time period with a given probability. A comprehensive risk management approach requires supplementing by a stress-testing programme to evaluate the impact of extreme market events. Ultimately, it is these violent large price movements that cast great risks to the bank, which are not captured by VaR models.

The non-traded interest rate risk is often a greater source of market risk for banks since they have a wide mix of fixed-rate and floating rate assets and liabilities, which are sensitive to re-pricing when interest rates change. Here comes Asset-Liability Management (ALM) or Assets and Liabilities Committee (ALCO) process which banks keeps in determination of interest rate sensitivity of the balance sheet and the implementation of Risk Management practices to hedge the potential efforts of such interest rate charges.

# 2.5.5 Operational Risk

According to Dermot & Peter (2004), operational risk is not really one risk but many. It is a sweep up term covering everything that does not fall neatly under either credit risk or market risk. However, Kabir & Jason (2006) suggests that Operational risk refers to potential losses emanating from inadequate systems, failure of management, defective controls, frauds and human errors. It has been observed that derivatives are more prone to operational risk through cash transactions as they by their very nature are leveraged transactions.

The guiding principles of operational risk include factors like objectivity, consistency, relevance and transparency. Operational risk poses a great challenge to the top management in terms of bringing about harmonization in the business units, corporate governance, internal audit and risk management.

#### 2.5.6 Reputational Risk

CBK Guidelines (2006) define reputational risk as the potential that negative publicity regarding an institution's business practices, whether true or not, will cause a decline in the customer base, costly litigation, or revenue deductions. This risk may result from a financial institution's failure to effectively manage any or all of the other financial risks. Typical examples of the effect of reputational risk are on institutions exposed or perceived to be associated with the sub-prime mortgages in United States of America and the case of Triton Petroleum Limited in Kenya that almost caused a bank run on linked financial institutions.

Ultimately accountability for reputational risk management rests with the board (Hayne & David, 1976). The board of directors should address explicitly reputational risk as distinct and controllable risk to the institution's safety and soundness. Management should fully understand all aspects of reputational risk and exhibit a clear commitment to compliance.

# 2.5.7 Regulatory Risk

CBK Risk Management Guidelines (2006) define regulatory risk as risk of non-compliance with regulatory guidelines. It includes the current and prospective risk to earnings or capital arising from violations of, or non-conformance with laws, rules, regulations, prescribed practice, or ethical standards issued by the regulator from time. The risk also arises in situations where the laws or rules governing certain bank products or activities of the bank's clients may be ambiguous or untested. Regulatory risk exposes an institution to fines, civil money penalties, payment of damages and violation of contracts. It can lead to diminished reputation, reduced franchise value,

limited business opportunities, reduced expansion potential and an inability to enforce contracts.

# 2.6 Basel Committee on Banking Supervision (BCBS)

The BCBS Report (2000) outlines that risk management evolved from a strictly banking activity, related to the quality of loans, to a very complex set of procedures and instruments in the modern financial environment. The first remarkable step to build a framework for systematic risk analysis was the Basle Capital Accord, issued in July 1988. The aim of the Basle initiative was to reach international convergence of rules governing the calculation of levels of capital reserves for banks. The Accord set out the details and the agreed framework for measuring capital adequacy and minimum standards to be achieved by banks within the jurisdiction of the national supervisory authorities represented on the Committee, intended to be implemented in their respective countries.

The Basle framework, in its original version, is mainly directed towards assessing capital in relation to credit risk. The model sets out capital requirements according to a formula based on risk factors applied to categories of assets, rated according to their potential risk. The Basle directives are standardized, and have been implemented not only in the ten countries that were original members of the Banking Supervision Committee of the Bank for International Settlements, but also in many other countries throughout the world. In 1993, the Basle methodology was revised, and credit risk analysis was improved. But, more importantly, new provisions, to take into account of market risk, already recognized as a major source of risk, were announced as a necessary development.

A new methodology was put forward for discussion, contemplating a standard model for the assessment of market risk. Therefore, in January 1996, the Basle Committee on Banking Supervision released an amendment to the July 1988 Capital Accord to irrespective of their size and complexity of business and are reflective of the strength of an individual bank's risk management practices.

# 2.7.2 Board and senior Management oversight

CBK Prudential Guidelines (2006) provides that to be effective, the concern and tone for risk management must start at the top. While the overall responsibility of risk management rests with the BOD, it is the duty of senior management to transform strategic direction set by board in the shape of policies and procedures and to institute an effective hierarchy to execute and implement those policies. To ensure that the policies are consistent with the risk tolerances of shareholders the same should be approved from board.

The formulation of policies relating to risk management only would not solve the purpose unless these are clear and communicated down the line. Senior management has to ensure that these policies are embedded in the culture of organization. Risk tolerances relating to quantifiable risks are generally communicated as limits or sublimits to those who accept risks on behalf of organization. However not all risks are quantifiable. Qualitative risk measures could be communicated as guidelines and inferred from management business decisions.

To ensure that risk taking remains within limits set by senior management/BOD, any material exception to the risk management policies and tolerances should be reported to the senior management/board who in turn must trigger appropriate corrective measures. These exceptions also serve as an input to judge the appropriateness of systems and procedures relating to risk management. To keep these policies in line with significant changes in internal and external environment, BOD is expected to review these policies and make appropriate changes as and when deemed necessary. While a major change in internal or external factor may require frequent review, in absence of any uneven circumstances it is expected that BOD re-evaluate these policies every year.

business of taking risk, it should be recognized that an institution need not engage in business in a manner that unnecessarily imposes risk upon it: nor it should absorb risk that can be transferred to other participants. Rather it should accept those risks that are uniquely part of the array of bank's services.

According to SBP Risk Management Guidelines (2000) risk management practices broadly take the following different hierarchy levels;

Strategic level: It encompasses risk management functions performed by senior management and BOD. For instance definition of risks, ascertaining institutions risk appetite, formulating strategy and policies for managing risks and establish adequate systems and controls to ensure that overall risk remain within acceptable level and the reward compensate for the risk taken.

Macro Level: It encompasses risk management within a business area or across business lines. Generally the risk management activities performed by middle management or units devoted to risk reviews fall into this category.

Micro Level: It involves 'On-the-line' risk management where risks are actually created. This is the risk management activities performed by individuals who take risk on organization's behalf such as front office and loan origination functions. The risk management in those areas is confined to following operational procedures and guidelines set by management.

Expanding business arenas, deregulation and globalization of financial activities emergence of new financial products and increased level of competition has necessitated a need for an effective and structured risk management in financial institutions. A bank's ability to measure, monitor, and steer risks comprehensively is becoming a decisive parameter for its strategic positioning. The risk management framework and sophistication of the process, and internal controls, used to manage risks, depends on the nature, size and complexity of institutions activities. Nevertheless, there are some basic principles that apply to all financial institutions

irrespective of their size and complexity of business and are reflective of the strength of an individual bank's risk management practices.

# 2.7.2 Board and senior Management oversight

CBK Prudential Guidelines (2006) provides that to be effective, the concern and tone for risk management must start at the top. While the overall responsibility of risk management rests with the BOD, it is the duty of senior management to transform strategic direction set by board in the shape of policies and procedures and to institute an effective hierarchy to execute and implement those policies. To ensure that the policies are consistent with the risk tolerances of shareholders the same should be approved from board.

The formulation of policies relating to risk management only would not solve the purpose unless these are clear and communicated down the line. Senior management has to ensure that these policies are embedded in the culture of organization. Risk tolerances relating to quantifiable risks are generally communicated as limits or sublimits to those who accept risks on behalf of organization. However not all risks are quantifiable. Qualitative risk measures could be communicated as guidelines and inferred from management business decisions.

To ensure that risk taking remains within limits set by senior management/BOD, any material exception to the risk management policies and tolerances should be reported to the senior management/board who in turn must trigger appropriate corrective measures. These exceptions also serve as an input to judge the appropriateness of systems and procedures relating to risk management. To keep these policies in line with significant changes in internal and external environment, BOD is expected to review these policies and make appropriate changes as and when deemed necessary. While a major change in internal or external factor may require frequent review, in absence of any uneven circumstances it is expected that BOD re-evaluate these policies every year.

# 2.8 Prudential Guidelines on Risk Management

#### 2.8.1 Corporate Governance

The CBK Prudential Guidelines (2006) puts emphasis on risk based oversight which emphasizes on top-down approach. The focus is for institutions to establish strong corporate governance structures cascaded down to the management and the entire workforce to ensure strategic goals and objectives are achieved. The Guideline which is issued under Section 33(4) of the Banking Act empowers the CBK to issue guidelines to be adhered to by all financial institutions in Kenya in order to maintain stable and efficient banking and financial system. The following are the key stipulations required to be complied to by the various parties charged with the mandate of managing affairs of the institutions;

Shareholders: - Shareholders of banking institutions are required to jointly and severally protect, preserve and actively exercise the supreme authority of the institution in general meetings. To that extent, they should ensure only credible persons of good standing in society who can add value to the institution's business are elected or appointed to the board of directors. The shareholders should also utilize powers vested in general meetings to change the composition of the board that does not perform to expectation or in accordance with mandate of the institution.

Central Bank of Kenya require institutions to seek approval when transfer of existing shareholding in excess of 5% of the bank's share capital, or acquisition of more than 5% of share capital where there is fresh capital injection.

**Directors:** - All directors are required to seek clearance from Central Bank by undergoing 'fit and proper test' before they take up their positions. The major duties and responsibilities to be performed by directors of institutions include; Regulating the manner in which the business is conducted; Corporate Planning; Establish and ensure the effective functioning of Board and Management Committees in key areas; Set-up an effective internal audit department and an independent compliance function and Appoint, dismiss and define the duties of management.

Board Committees: - Board Committees assist the board and its directors in discharging the duties and responsibilities. The key committees include; Board Audit Committee (BAC), Board Credit Committee (BCC), Assets and Liabilities Committee (ALCO), Risk Management Committee (RMC) and the Executive Committee (EC). The BAC and RMC are required to be independent of functional responsibilities. The Audit Committee should consist of not less than three members, and at least two of whom should be independent non-executive directors. The chairman of the BAC should be independent non-executive director and should not be the chairperson of the board. The Guideline has specified the terms of reference, duties and responsibilities expected from each committee.

Chief Executive Officers (CEOs):- No chief executive officer shall take up his/her position prior to being cleared by the Central Bank of Kenya. The sound operations of the institution will depend critically on the guidance given to management by the CEO. The chief executive shall be wholly responsible to the Board for the day to day running of the institution. The key responsibility of the CEO is ensuring that policies spelt out by the board in the institutions overall corporate strategy is implemented with support of the entire management of the organization.

# 2.9 Empirical studies on Risk Management

Risk management has been cited in several studies as a critical factor contributing to the overall success of organizations to meet their desired goals and objectives. According to Yussuf (2005, risk management in Kenya is broadly centered on two key risks; Credit risk and Operational risk. The study which focused on operational risk management highlighted the potential exposures surrounding operations of institutions that include; inadequate information systems, breaches in internal controls, frauds, and unforeseen catastrophes.

This view however, falls short of recognizing the integration of various risk elements hence need to have an enterprise wide approach to risk management. In the recent

past, there has been various developments that have revolutionized the banking sector such as use of sophisticated technologies, e-commerce, mergers and acquisitions and innovative banking products. These changes have given rise to new operational risks that require appropriate and effective risk management systems. The recognition of the importance of risk management has led to international trends favoring the inclusion of capital charges not only for operational risks but also for Market risk besides the conventional charges for credit risk.

Furthermore, according to Mwirigi (2004), credit risk management techniques were quite elaborate among financial institutions in Kenya. The study denotes that institutions had put in place structured policies and processes on credit assessment, credit risk mitigating techniques, provisioning and risk measuring and monitoring techniques. However, there is inadequate information on the management of other financial risks inherent in banking operations.

These approaches reveal the narrow scope taken on risk management which has limited the process to separate individual risks. This therefore requires a paradigm shift in assessing financial risk exposures and adopting a holistic approach in the whole area of risk management. The Credit-Suisse Group (2001), stated that banks may engage in risk mitigation techniques to manage exposure to market and credit risk but which in turn produce other organizational risks, process risks, technology risk, human risk and external risks. The Bank of International Settlements (1999), the Cadbury report (2000) and the Tunbull report (2000) all call on the various boards' responsibility to identify the relevant risks to have an "embedded" risk management system not just "separate exercise" or "to take risk into consideration". This is cardinal for proper financial risk management.

Since objectives of various organizations and operating environment are dynamic and continually evolving, the risks they face similarly change. A sound system of risk management therefore depends on a thorough and regular evaluation of the nature and extent of the risks which a bank is exposed. In view of the fact that profits are in part

the reward for successful risk-taking in business, the purpose of risk management is to help manage and control risk appropriately rather than to eliminate it (Financial Reporting Council, 2000).

Earlier studies have also revealed inadequacies in risk management systems. The "Daily Nation" of June 16, 2005 quoted CBK survey which indicated that only 17 banks have set aside funds to cover risk management activities and out of these, only 10 submitted adequate and consistent risk monitoring reports. Further studies on risk management will improve understanding and preparedness of institutions and enhance bank-wide risk management approach.

#### 2.10 Conclusion

From the foregoing empirical studies, it is widely acknowledged that utilization of better risk management systems has a key role in the management of risks that are significant to the fulfillment of business objectives. A key observation is the importance of setting up necessary structures to manage risks in the entire institution based on the size, severity and probability of the identified risks.

Whereas credit and operational risks remain a major concern among many institutions in Kenya, the innovative nature of the financial sector, introduction of new products and business expansion across the borders has brought forth other risks such as country and foreign exchange risk that was disregarded in the past. A holistic risk management framework is therefore vital in ensuring current and evolving risks can be adequately identified, measured and mitigated timely and appropriately.

A sound system of risk management contributes to safeguarding shareholders' investment, company's assets and directing staff efforts in achieving business targets. Adoption of key elements of risk management will translate to effective identification, measurement, control and monitoring of all inherent risks. This will further support organizations in computing economic capital which is used as an

indicator of risks and returns for business activities to determine pricing and allocate capital appropriately.

Since objectives of various organizations and operating environment are dynamic and continually evolving, the risks they face similarly change. It is therefore important that a continuous review of risk management is carried out to determine effective techniques to handle emerging risks. A sound system of risk management therefore depends on a thorough and regular evaluation of the nature and extent of the risks which the company is exposed. In view of the fact that profits are in part the reward for successful risk-taking in business, the purpose of risk management is to help manage and control risk appropriately rather than to eliminate them.

The evolving nature of risks calls for robust and updated risk management techniques. Further studies are required to evaluate various risks faced by organizations and systems put in place to address them. This study was therefore carried out to establish the various risk management practices adopted by commercial banks in Kenya and adequacy of the various techniques used to identify, measure, monitor and control the overall levels of risks undertaken.

#### CHAPTER THREE

#### METHODOLOGY

#### 3.1 Introduction

This chapter contains the research design, the population and sample, data collection and data analysis.

#### 3.2 Research Design

The study was a survey designed to identify the types of financial risks experienced by commercial banks and the various risk management techniques adopted to mitigate the risks. The study was based on descriptive research design because risk management is mainly based on qualitative attributes with few aspects of numerical measurements. The study was therefore based on combination of quantitative and qualitative data obtained using self-administered questionnaires; however for bank officials who were busy or unwilling to provide information in writing, interviews were conducted.

# 3.3 Population and Sample

The population comprised of all the 45 financial institutions operating in Kenya as at 31<sup>st</sup> December 2009 as indicated in Appendix III attached. The data was obtained from the Central Bank of Kenya to select the sample for research. Sample data was based on market share analysis as at 31<sup>st</sup> December 2009 as indicated in the table below:

	Market	Share Analys	is (Shs	m) as at 31.1	2.2009				
Peer Group	No. of Banks	Total Net Assets	%	Customer Deposits	%	Capital & Reserves	%	Pre-Tax Profits	%
Large	14	986,435	83	723,820	84	134,006	81	39,861	92
Medium	17	154,258	13	109,463	13	22,533	14	2,920	7
Small	14	42,961	4	30,727	4	9,053	5	512	1
Total	45	1,183,654	100	864,010	100	165,592	100	43,293	100

Source: 2009 CBK

Annual Report

The financial institutions have been classified into three categories based on total assets. As at 31<sup>st</sup> December 2008, 31% or 14 institutions were in the large peer group, 38% or 17 institutions in the medium group while 31% or 14 institutions were categorized under the small banks peer group. The large peer group accounted for greater proportion in terms of financial parameters (total net assets – 83%, customer deposits – 84%, capital reserves – 81% and pre-tax profits – 81%).

Two sampling methods were adopted namely; Stratified sampling and Judgmental sampling. Stratified sampling ensures representation for the overall population and also for the key sub groups based on the peer classification while judgmental sampling ensured institutions with greater proportion of total assets were selected from each asset category. To determine the number of units from each peer group, the proportionate allocation method was adopted.

A random selection was made from each peer group proportionate to the number of institutions in each stratum.

n was selected such that;

$$ni = \frac{n}{N}(Ni)$$

Proportions	Stratum	Pop	Sample		
14/45	N <sub>1</sub>	14	n <sub>1</sub>	7.8	8
17/45	N <sub>2</sub>	17	n <sub>2</sub>	9.4	9
14/45	N <sub>3</sub>	14	n <sub>3</sub>	7.8	8
	Total	45		Total	25

N = 25

From the identified sample, 8 institutions were chosen from both the large and small peer group, while 9 institutions were sampled from the medium peer group.

#### 3.4 Data Collection

#### 3.4.1 Information Gathering

Primary data was collected in this research. Information gathered included the structure of risk management framework in the organization, proportion of resources allocated to risk management and level of importance attached to the risk management function. The primary data was gathered through the communication method by use of self-administered questionnaires delivered by hand to each respondent and collected later (drop and pick questionnaires). Control for data validity and reliability was done through telephone communications with various respondents to confirm information received. Data was verified with corresponding information disclosed in published financials released through public media and in the Central bank of Kenya annual publications.

The respondents mainly comprised Top Executives, Risk Managers, Compliance officers, Chief Internal Auditors or General Managers for the small institutions. The selection of respondent was mainly guided by the type of the risk management framework and Incorporation / Ownership structure i.e. Local, or foreign based. The foreign owned financial institutions differed depending on whether it is locally incorporated as a subsidiary or operating as a branch of the holding company which is incorporated outside Kenya.

The questionnaire was based on the descriptive research design where both quantitative and qualitative data was collected. The respondents were asked to indicate on a 5-point Likert scale the degree of emphasis or importance attached to the risk variables as identified in the questionnaire. The secondary data was obtained from both internal and external sources. The internal sources included the institution's strategic plans, corporate governance structures, annual reports and corporate plans while external sources included financial publications, media sources, books and periodicals.

#### 3.4.2 Information validation and Control

Data validation was critical in determining the truthfulness of the research results. It included qualitative and quantitative determination of precision, accuracy and completeness of information obtained. The validation process was performed both at the client end (to ensure instant feedback) and the tail server at the consolidation point. The following considerations enhanced quality, dependability and validity of feedback:

The questionnaire was designed such that respondents were guided and chose from specified suggested answers to prevent provision of invalid or irrelevant information.

Triangulation: - This validity procedure entailed use of multiple and different sources of information to establish the truth. The research corroborated information in the institutions' published annual reports on risk management and CBK Bank Supervision Annual Reports which gave an overview on risk management in the Banking sector. Telephone confirmation was done with willing respondents to validate information received. Findings of previous studies on risk management related topics were also used to gauge on accuracy of information obtained.

## 3.5 Data Analysis

The data collected was analyzed by categorizing, ordering and summarizing so as to obtain answers to the research questions. The analysis involved preparing the data by editing, coding and inputting into computer to facilitate transformation using software such as excel and access. Descriptive statistics was used to analyze the data on the risk management framework adopted by the institution and the degree of supervision assigned to the specific risks.

The study involved the use of the measures of distribution (tables and graphs) and measures of central tendency (the mean, median and the mode). Inferential statistics was used to make inferences from the data to more general conditions and provide conjecture about the population based on the sample results.

#### CHAPTER FOUR

## DATA ANALYSIS, PRESENTATION AND FINDINGS

#### 4.1 Introduction

This chapter contains the data analysis, presentation and findings of the study. The findings comprise data collected from a sample of 25 institutions.

### 4.2 Importance of effective risk management to achievement of organizational goals

A larger proportion of the institutions sampled (88%) considered effective risk management systems as key contributor to achievement of organizational goals, while 3 institutions, equivalent to 12% of the total sample underestimated the significance of risk management as indicated in the following table and graphical representation;

Table 1: Importance of risk management

Degree of importance	No. Respondents	Proportion	
Very Important	22	88%	
Fairly important	3	12%	
Not Important	0	re lorder	

Source: Research Findings

This implies that a higher proportion of institutions attach greater importance to risk management as a contributor to achievement of organizational goals and objectives.

# 4.3 Determining whether organizations have developed close link between strategic objectives and management of risk:

40% of the institutions sampled revealed close linkage between strategic objectives and risk management, however a higher proportion (60%) of the sample are yet to fully establish a link between strategic planning and management of risk as tabulated below:

Table 2 - Link between strategic objectives and risk management

Degree of significance	No. of Respondents	Proportion
Quite significant	10	40%
Fairly significant	15	60%
Not significant	0	0

Source: Research Findings

The challenge in linking strategic planning to risk management is adduced to the fact the board and senior management may not have adequate knowledge of risk management to integrate the process in the strategy formulation.

## 4.4 Responsibility of Risk Management is documented

A higher proportion (80%) of the commercial banks sampled had documented the responsibility of risk management including well specified both at management and board level. However five of the respondents (20%) had not formulated clear responsibilities for the risk management process as shown in the following table:

Table 3: Responsibility of risk management

Degree of importance	No. Respondents	Proportion	
Well documented	20	80%	
Not documented	5	20%	

Source: Research Findings

A greater proportion of the institutions have formalized the process of risk management indicating increased importance attached to risk management.

## 4.5 Determining whether responsibility of Risk Management is well understood

A smaller percentage (20%) of the respondents has a good knowledge of the responsibility of risk management. However many of the respondents have a general knowledge of the responsibility of risk management while five respondents did not have adequate understanding of risk management as reflected in the following table:

Table 4: - Level of understanding of Risk Management

Responsibility of Risk Management is understood	No. Respondents	Proportion	
Quite well	5	20%	
Moderate	15	60%	
Not understood	5	20%	

Source: Research Findings

Although many institution sampled had a documented responsibilities for risk management, a higher percentage of the respondents (60%) had moderate knowledge of the responsibility of risk management. Therefore process of risk management is not well understood despite formal documentation in place.

#### 4.6 Adequacy of resources allocated in support of risk management

8% of the institutions had allocated adequate resources for risk management, 32% indicated fairly adequate resource while a higher percentage (60%) had inadequate resources for risk management process.

Table 5:- Adequacy of resource allocation

Adequacy of resources	No. Respondents	Proportion
Adequate	2	8%
Moderate	8	32%
Inadequate	15	60%

Source: Research Findings

The respondents which failed to assign adequate resources for risk management attributed it to lack of methodology to undertake budgetary allocation and system limitations in measuring level of risk exposure.

#### 4.7 Provision of training on risk management

Many institutions have endeavoured to carry out training of staff on risk management. 60% had been trained on risk policies, procedures and practices while 40% had general knowledge on risk management practices.

Table 6:- Level of training on risk management

Training on Risk Management	No. Respondents	Proportion
Risk policies, procedures and practices	15	60%
General knowledge on risk management	10	40%

Source: Research Findings

#### 4.8 Sources of Risks:

A higher proportion of the sampled institutions (92%) pay attention to operational risk which comprised of financial risk, project risk, compliance risk, technological risk and human risk. However in regard to management of strategic risk, many institutions considered political environment as a major risk while reputational and opportunity risk was ignored.

Table 7:- Sources of risk

Significance of risk exposure	No. Respondents	Proportion
Strategic Risk	23	80%
Operational Risk	20	92%
Other Risk	24	96%

Source: Research Findings

Many of the institutions consider operational risk as a major risk. Other forms of risk considered to pose higher level of exposure include Liquidity, credit, Market and Legal risk. Strategic risk ranked lower than operational or other forms of risk.

## 4.9 Use of computer software for risk management

40% of the institutions indicated use of computer generated reports for risk identification, analysis, treatment and monitoring. However, a higher percentage (60%) lack adequate systems and reports to assess level of risk exposure as tabulated in the following table:

Table 8:- Use of computer software for risk management

Use of computer software	No. Respondents	Proportion
for risk management		
Yes	10	40%
No	15	60%

Source: Research Findings

A higher proportion of institutions who do not take advantage of IT systems to assess risk is mainly attributed to inadequate budget allocation and lack of adequate staff capacity to discern the information required for accurate evaluation of risk exposure.

#### 4.10 Tools used for risk identification:

A higher percentage of institutions rely on conventional methods to identify risks such as audit and past experience. Tools such as scenario analysis and surveys which requires IT systems were least applied by institutions.

Table 9:- Tools applied for risk identification

Tools applied for risk identification	No. Respondents	Proportion
Audits	22	88%
Brainstorming	15	60%
SWOT	18	72%
Judgemental	16	64%
Surveys	10	40%
Scenario analysis	15	60%
Past Experience	20	80%

Source: Research Findings

Most of the sampled institutions applied at least one of the specified tools or techniques in its risk management process.

#### 4.11 Tools applied in Treatment and control of risks:

The following are the various mechanisms and tools specified by institutions for risk treatment and control:

BUSINESS RISK	RISK TREATMENT
Strategic	Well formulated strategic Plan, Effective MIS and Balance scorecard at corporate level to align goals to strategic plan
Credit	Credit Policy, Credit Risk scoring, Monitoring and MIS.
Operational	Effective MIS, well formulated operational manuals and policy, key risk Indicators and Audit reviews
Market	FX position management, compliance with CBK minimum FX exposure ratio, revaluations of market/bond position, effective MIS.
Other	Business Continuity Management and Disaster Recovery plans to regain critical processes in the event of unforeseen business disruption.

## 4.12 Degree to which risk management has improved performance

Many of the respondents consider risk management as a tool to improve service delivery and better resource allocation and utilization. Components such as corporate planning and achievement of objectives was least considered to be impacted by better risk management. Impact of risk management on corporate planning and achievement was picked by 48% and 40% respectively while quality services and resource utilization was favourable by 80% and 72% respectively by the respondents as specified in the following table;

Table 10:- Establishing whether risk management has improved performance

Risk management and improved performance	No. Respondents	Proportion
Robust corporate Planning	12	48%
Achievement of objectives	10	40%
Quality of service delivery	20	80%
Resource Allocation & Utilization	18	72%

A higher number of the sampled institutions have narrowed down the benefits of risk management to resource allocation and delivery of better services

#### CHAPTER FIVE

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter contains summary of the findings which encompasses types of financial risks common in Kenyan market, conclusions, limitations of the study and recommendations for further research.

#### 5.2 Summary of Findings

From the foregoing analysis, many of the institutions sampled indicated that comprehensive and systematic risk identification is carried out mainly by the risk committee or the risk champion of the organization. Besides credit and market risks, the following were identified as the key strategic and operational risks facing institutions in Kenya:

Political Risk: - Attributed to disruptions that may arise from the evolving democratic environment that could send negative signals to the market and investors.

Reputational Risk: - Risk of damage to credibility and reputation. Bigger institutions raised more concern for reputational risk than smaller institutions. This is mainly due to their wider client base hence more reliance on retail depositors compared to smaller institutions which have few and loyal depositors.

Financial Risks: - Risks arising from fraudulent schemes, forgeries by staff and other form of losses. This was however noted to be on a declining trend due to improved system controls and strict vetting of new employees.

Project Risks: - Risk attributed to introduction of new operating systems and products. This featured prominently in the sampled institutions and is linked to migration by many banks to new systems and introduction of innovative products to cope with increased competition in the banking sector and wider branch network.

Compliance Risk: - The risk of failing to conform with provisions of the government laws and other regulatory guidelines. Exposure to compliance risk has significantly declined in the recent past due to improved supervisory oversight by Central Bank of Kenya.

**Technological Risks**: - This arises from new innovations, obsolescence and dependability of existing systems. This posed a higher exposure because of new systems coupled by limited support from vendors resulting to unexpected high level of losses and expenses at the preliminary stages.

Human Risks: - Linked to interruptions arising from staff dissatisfaction such as strike by employees and loss of key personnel. The level of staff turnover was noted to be higher among the financial institutions because of stiff competition and demand for higher staff remuneration.

Other types of business risks identified by the sampled organizations included: credit risk (failure to honor obligations by borrowers), Liquidity risks (risk of failing to meet maturing financial obligations) and market risk (risk associated with unfavorable movement of market prices, interest rates or foreign exchange positions).

The tools commonly used by organizations to identify business risks included the following: Audit or physical inspection, Brainstorming, SWOT analysis, Surveys / questionnaires, Scenario analysis and past experiences. Three banks which are branches / subsidiaries of international banks mainly relied on scenario analysis and process evaluation because of advances management information systems and support obtained from international parent organizations. Application of conventional methods such as audit and use of past experiences featured prominently among the locally incorporated institutions.

#### 5.3 Conclusions

The survey results indicate a number of risk management challenges faced by institutions in meeting regulatory requirements and shareholders demands:

Institutions in Kenya are yet to develop internal rating models to assist in assessing adequacy of capital which is commensurate to the level of risk exposure taken by organizations. The challenge in developing internal models is largely attributed to system limitations and inadequate capital resources. There is need to develop or procure operating systems that that provide adequate information required for effective rsik management.

Human resources competencies have been identified as a cross cutting challenge. The banks are yet to have competent staff to oversee risk management and local training institutions have not developed courses to address the knowledge gap. Training institutions should introduce programmes that include risk management courses.

Upgrades and overhauls of existing IT systems and migration to new systems has been identified as an impediment in the introductory stages. This is however expected to improve risk oversight once the systems stabilize.

The challenges notwithstanding, it is noteworthy that most financial institutions in Kenya have embraced enhanced risk management practices and capital management. The international banks were noted to have better risk management functions to handle management of risks due to structural, financial and human resource support obtained from the parent or head office institutions. Most of the locally incorporated banks lack the necessary infrastructure to institute effective risk management systems. The Central Bank of Kenya has also enhanced its risk supervisory processes which has improved investor confidence and created a fair operating business environment for the various financial market players.

#### 5.4 Recommendations

Risk management has been widely recognized as an important determinant of organizational success. It plays a pivotal role in ensuring institutions meet their

corporate and shareholders demands. The following are key recommendations for consideration:

First, there is need to link risk management to strategic planning process. This ensures that risk management is driven from the board level and obtains the required impetus to deliver on its mandate of managing risks facing the organization.

The risk management framework should exhibit independence from other functions to limit interference and undue influence from senior management. The head of the risk function should have direct report line to the board of directors or a committee constituted by the board.

Resource deficiency was cited by most institutions as an impediment to an effective risk management process. Institutions should allocate adequate financial and human resources to the risk management function.

Finally, there is need to enhance training and level of awareness on risk management. An effective and successful risk management entails cascading knowledge to the lower staff cadres and facilitating relevant training on key risk areas to ensure staff are updated and equipped at all times with requisite risk management techniques.

## 5.5 Limitations of the Study

Foremost, risk management is still evolving in Kenya and therefore many institutions lack adequate information on effective risk management methodologies. As a result, many of the responses were not conclusive and required further clarification.

Time constraint was also an impediment. Many of the respondents were senior executives with busy work schedules. It was challenging to have them accept and respond appropriately to the questionnaire.

Confidentiality was also barrier to achieving all the required information. Many of the bank officers are restricted from disclosing any company information hence difficulty in releasing all the pertinent issues regarding risk management.

### 5.6 Recommendations for further research

The results of the study reveals that risk management in Kenya is still developing hence need to carry out further research on effective risk management systems. It is vital that the concept surrounding the key pillars of risk management namely; risk identification, assessment, mitigation and control are demystified.

As organizations evolve and seek new business opportunities, new risks emerge. The current business world is mainly driven on information technology platform and increasing appetite to conduct business across the borders. There is need to carry out further research on exposures arising from heavy reliance on automated systems and exploring new risk management techniques to keep pace with the changing business world.

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#### INTRODUCTION LETTER

Dear Sir / Madam,

This Questionnaire is designed to assist in carrying out a study on the extent of implementation of Risk Management Systems by Financial Institutions in Kenya.

My sincere request is to urge you respond to the questions earnestly. The research is carried out purely for academic purposes and all the information will be treated with confidentiality it deserves. It is only the researcher and the project supervisor who will have access to the information given. Upon request, the summary of the results will be made to you after the information collected is duly analyzed.

Thank you very much for your valuable time and co-operation.

Yours faithfully,

Lecturer/ Supervisor

Talel L.C

MBA Student
School of Business

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## Questionnaire list

## Organizational Culture and Support

- This section seeks information about the importance of risk management to your organization;
- a) Name of the Organization (Optional)-----
- b) Position in the Organization-----
- c) Department-----
- 1.1 How important is effective risk management to the achievement of your organization's objectives?
  (Please tick as appropriate)

Not at All	4	Some	-	Very Important
1	2	3	4	5

1.2 Effective risk management can improve

your organization's performance.
(Please tick as appropriate)

Strongly				Strongly
disagree	Disagree	Neutral	Agree	Agree
1	2	3	4	5

1.3 To what degree has your organization

developed a close link between its strategic objectives and management of risks [eg risk identification is conducted during strategic planning]? (Please tick as appropriate)

Not All	at	4	Some	<b>-</b>	Very Important
1		2	3	4	5

1.4 The accountability (responsibility) for risk management within your organization is;

	Not at All	+	Some	+	Very Important
Documented and communicated	1	2	3	4	5
Understood	1	2	3	4	5

(Please tick as appropriate)

1.5 Who is the sponsor or "champion" for risk management within your organization:

	Circle an enar apply
□ the Chief Executive Officer?	1
□ another senior executive?	2
☐ Head of Finance?	3
□. a committee?	4
□. the Risk Manager?	5
☐ the Internal Auditor?	6
□ other? (Please specify below).	
	Section 1

1.6 (a) Your organization is able to allocate

appropriate resources in support of risk management policy and practice.

			Strongly
Disagree	Neutral	Agree	Agree
2	3	4	5
	Disagree 2	Disagree Neutral 2 3	Disagree Neutral Agree 2 3 4

Circle all that annly

(Please tick as appropriate)

(b) Specify pro	portion of funds allocated to Risk Management as a percentage of total
Assets	

□ budgetary? 1 □ cultural? 2	applie
□ cultural? 2	
7	
other? (please specify below)	

1.7 Has training been provided by your organization on the following areas:

	Staff			Mana	gement	
	Yes	No	N/A	Yes	No	N/A
Risk	1	2	3	1	2	3
Risk Policy & Practices	1	2	3	1	2	3
Risk Taking	1	2	3	1	2	3

(Please tick as appropriate)

## 1.8 (a) In your organization:

	Yes	No
Is the governing Board held accountable for managing risks?	1	2
Are executives held accountable for managing risks?	1	2
Are staff held accountable for managing risks?	1	2

(Please tick appropriately)

- (b) If yes, please detail the mechanism(s) by which the various levels in the organization are held to account for risk management?
- (i) The Board (if applicable)

(ii)	Exe	cutives
1		

Staff			

1.9 Overall, does the culture of your

organization tend to reflect a risk taking or risk averse attitude [1 is strongly risk taking, 5 is strongly

Risk 7	Taking -		→ Risl	Averse
1	2	3	4	5

risk averse]? (Please tick as appropriate)

## 2. Risk Management Policy

This section seeks information about your policy for risk management and how that policy is promulgated throughout your organization.

Yes No
2.1 Does your organization have a documented risk management policy? 1

(Circle as appropriate)

2.2 Who approved the policy [the]:	Circle all
**	that Apply
☐ Chief Executive Officer?	1
□ Board/Executive Management Team?	2
□. Director of Finance?	3
☐ Audit Committee?	4
□ Risk Manager?	5
other? (please specify below)	6

2.3 To what extent is your organization's risk management policy promulgated through the following levels:

	Not at All	4	Some	Significant	
Chief Executive Officer/Board?	1	2	3	4	5
Understood	1	2	3	4	5
Executive management?	1	2	3	4	5
Staff?	1	2	3	4	5
Stakeholders?	1	2	3	4	5

(Please tick as appropriate)

Other [please specify below].

2.4 In pursuing its objectives, your organization views risk as:

	Yes	No
A threat?	1	2
An opportunity?	1	2
Are staff held accountable for managing risks?	1	2

(Please tick as appropriate)

Other? (Please specify below)

#### 3. Risk Identification

This section asks questions about how your organization identifies the risks it faces:

## 3.1 Your organization carries out a

comprehensive and systematic identification of its risks relating to each of its declared objectives. (Please tick as appropriate)

Strongly				Strongly
disagree	Disagree	Neutral	Agree	Agree
1	2	3	4	5

# 3.2 In identifying risks to what extent does your organization consider the following sources of risk:

Circle	e all
that a	pply
Strategic	
□. political?	1
opportunity risks [the risk of missed opportunities]?	2
□ environmental?	3
preputation risk [risk of damage to credibility and reputation]?	4
Operational [risks associated with delivery of services]	
☐ financial risk [risks arising from spending on projects, fraud]?	5
□ project risk [risks of introducing new systems]?	6
☐ compliance risk [the risk of failing to meet government laws]?	7
☐technological risks [innovation, obsolescence, dependability]?	8
human risks [strike by employees, loss of key personnel]?	9
other? (please specify below)	10

	Yes	No
3.3 Does your organization have a risk register/database?	1	2
(Please circle as appropriate)		
3.4 If Yes to 3.3, in respect of each identified risk, the risk register/databa	se reco	ords:
	Circl	e all
	that	apply
□. source?	1	
□ nature?	2	
□ existing controls?	3	
□ consequences and likelihood?	4	
□ initial risk rating?	5	
□ other? (please specify below)	6	
The state of the s	Yes	No
3.5 Does your organization use computer software for risk management?	1	2
3.6 If yes to 3.5, is risk management software used for:	Circl	le all
	that	Apply
. risk identification?		1
□ risk analysis and evaluation?		2
□ risk treatment?		3
□ risk monitoring and reporting?		4

## 3.7 What tools/techniques are used by your organization to identify risks: Circle all

	that Apply
□ audits or physical inspection?	1
□. brainstorming?	2
☐ SWOT (strengths, weaknesses, opportunities, threats) analysis	? 3
□ interview/focus group discussion?	4
□ judgmental?	5
□ surveys/questionnaires?	6
□, scenario analysis?	7
past organizational experience?	8
□. process analysis?	9
other? (please specify below)	10

## 4. Risk Analysis, Evaluation and Treatment

This section seeks to establish the extent/scope and responsibilities for risk analysis, evaluation and treatment in your organization.

# **4.1** To what extent are the organization's risks assessed by using:

	Not at	Some-Times			Always
Qualitative analysis methods (eg high, moderate, low)	1	2	3	4	5
Quantitative analysis methods i.e identification of a precise level?	1	2	3	4	5

(Please tick as appropriate)

## 4.2 Your organization:

	Strongly disagree	Disagree	Neutral	Agree	Strongly
Collates risks for decision making on what actions to take	1	2	3	4	5
Analyses and evaluates opportunities it has to achieve objectives.	1	2	3	4	5

(Please tick as appropriate)

4.3 Does your organization have an up to date:	Yes	No
□ business continuity plan?	1	2
□ disaster recovery plan for information technology?	1	2
(Please circle as appropriate)		

# **4.4** To what extent does your organization use the risk treatment option of:

	Not at All		Some-	Always	
Accepting/retaining the risk?	1	2	3	4	5
Avoiding the risk	1	2	3	4	5
Reducing the risk eg controlling	1	2	3	4	5

(Please circle as appropriate)

## 5. Risk Monitoring and Review

This section seeks information on how your organization monitors, reviews and reports on risks which eventuate.

5.1 Does your organization have key indicators to routinely monitor the:			No
Ō	levels of risk?	1	2
Q	application of the risk treatment measures?	1	2
Q	effectiveness of the risk treatments?	1	2
(P	lease circle as appropriate)		

If Y	les	please	specify	the	key	performance	indicators	being	used:
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5.2 Does your organization's most recent Annual Report include:	Yes	No
a description of the risks faced by your organization?	1	2
a description of risk management by your organization?	1	2
☐ a risk management declaration by the Board and/or CEO (Please circle as appropriate)	1	2
5.3 Are the risk management processes within your organization s	subject	to audit or
5.3 Are the risk management processes within your organization so other quality assurance mechanism:		
other quality assurance mechanism:	Yes	No
other quality assurance mechanism:	Yes	No
other quality assurance mechanism:  □ internal audit?	Yes	No 2

### 6. Effective Risk Management

This section seeks information on the effectiveness of the risk management components within the organization.

To what degree has risk management improved performance and or outcomes in the following areas:

Not at	Some			Significantly	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
		All 2 1 2 1 2	All  1 2 3  1 2 3  1 2 3	All  1 2 3 4  1 2 3 4  1 2 3 4	

(Please circle as appropriate)

other? [please specify]

## LIST OF BANKS IN KENYA AS AT 31ST DECEMBER 2009

- 1 African Banking Corp. Ltd
- 2 Bank of Africa Ltd
- 3 Bank of Baroda Ltd
- 4 Bank of India Ltd
- 5 Barclays Bank of Kenya Ltd
- 6 CfC Stanbic Bank Ltd
- 7 Chase Bank Ltd
- 8 Citibank Ltd
- 9 Commercial Bank of Africa (K) Ltd.
- 10 Consolidated Bank Ltd
- 11 Co-operative Bank Ltd.
- 12 Credit Bank Ltd
- 13 Development Bank Ltd
- 14 Diamond Trust Bank (K) Ltd
- 15 Dubai Bank Kenya Ltd
- 16 EcoBank Ltd
- 17 Equatorial Commercial Bank Ltd
- 18 Equity Bank Ltd.
- 19 Family Bank Ltd.
- 20 Fidelity Commercial Bank Ltd
- 21 Fina Bank Ltd
- 22 First Community Bank Ltd
- 23 Giro Commercial Bank Ltd
- 24 Guardian Bank Ltd
- 25 Gulf Africa Bank Ltd
- 26 Habib AG Zurich
- 27 Habib Bank (K) Ltd
- 28 Housing Finance Company Ltd
- 29 I& M Bank Ltd
- 30 Imperial Bank
- 31 Jamii Bora Bank Ltd
- 32 Kenya Commercial Bank (K) Ltd
- 33 K-Rep Bank Ltd
- 34 Middle East Bank Kenya Ltd
- 35 National Bank of Kenya Ltd
- 36 National Industrial Credit Bank Ltd

- 37 Oriental Commercial Bank Ltd
- 38 Paramount Universal Bank Ltd
- 39 Prime Bank Ltd
- 40 Savings and Loan Limited
- 41 Southern Credit Bank Ltd.
- 42 Standard Chartered Bank
- 43 Transnational Bank Ltd
- 44 UBA Ltd
- 45 Victoria Commercial Bank Ltd