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E CREDIT RISK MANAGEMENT

PRACTICES OF COMMERCIAL BANKS IN KENYA

By

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**A Management Research Project submitted in partial fulfilment of
the requirement of the Degree of Masters of Business Administration,**

School of Business, University of Nairobi

October 2010



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DECLARATION

I Jason Onyango Ochola declare that this Credit Risk Management Project is my own original work and that all the sources have been correctly reported and acknowledged, and that this document has not been previously presented for any award at any University to obtain an academic qualification.

Signed Í í í í í í í í í .

Dateí í í í í í í í .

Jason Onyango Ochola

D61/71788/2008

The Research Project has been submitted for examination with my approval as the University Supervisor,

Signature; í í í í í í í í í í

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DEDICATION

To my parents Michael Ochola and Herine Ochola whose wise counsel guided me in pursuit of this level of education. I am grateful for the greatest inheritance that you could ever give to me, EDUCATION.



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NOWLEDGEMENT

My heartfelt gratitude goes to the Almighty God, who through his mercy gave me the insight, strength and perseverance to complete this study.

Special thanks to my supervisor Dr. Joshua Wanjare for his guidance, advice, support and patience which made it possible for me to accomplish this task. You ware a beacon of light and inspiration in my pursuit of knowledge.

Many thanks to colleagues who have been of great inspiration and assistance to me.

I salute all my family members, friends and colleagues who in one way or the other were instrumental towards this project. I also thank my respondents without whose input this work would not have been possible.

ABSTRACT

The study set to explore the credit risk management practices by commercial banks in Kenya. Emphasis was on the following; understand the process of credit risk identification by commercial banks, the extent to which commercial banks classify and monitor credit risks, to identify the various practices that the commercial banks adopt in managing the credit risks and analyze how these commercial banks monitor/gauge the success of the various policies adopted.

Primary data was collected through questionnaires and distributed to commercial banks operating in Kisumu. Data collected was analyzed by use of descriptive statistics and SPSS (version seventeen) was used for the purpose of the analysis. Results indicated that commercial banks have in place credit risk management practices. This is the case when it involves understanding the credit risk, identification, analysis/assessment and monitoring. Much of the information was from credit departments who are mainly involved in client appraisals and evaluation.

The study's major limitation was the unwillingness by the commercial banks to give out information pertaining to the subject matter. The respondents were mainly citing the strict rules that govern the release of such information. Given that this study was limited to credit risks, it was recommended that a similar study be carried out to cover other risks that affect this industry to forewarn the players in this sensitive but important industry to take great care as they seek to grow, expand and at the same time win the confidence of their customers.



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CHAPTER ONE

INTRODUCTION

1.1 Background

Commercial banks play an important role in directing the affairs of the economy in various ways. The operations of commercial banks record the economic pulse of the economy. The size and composition of their transactions mirror the economic happenings in the country. For example, the mass of failures of commercial banks in the 1930s reflected the phenomenon of severe global depression in the world.

Commercial banks have played a vital role in giving direction to economy& development overtime by financing the requirements of trade and industry in the country. By encouraging thrift among people, banks have fostered the process of capital formation in the country. In the context of deposit mobilization, given the saving-income ratio, commercial banks induce the savers in the community to hold their savings in the form of socially useful assets of which banks deposits constitute the most important element (Vaish, 1997).

Central Bank of Kenya (CBK) statutes laid down in the Kenyan laws govern the operations of the commercial banks. Since the liberalization of the Kenyan economy, the CBK has however remained hitherto the main regulator in all aspects of their operations. It is for this reason that a number factors influences the performance of the banking industry key among them the activities of the government and the general performance of the economy. Both monetary and fiscal measures enacted by various arms of government influences the aggregate economies of those countries. The resulting economic conditions influence all firms in various industries in the economy both negatively and positively. Whichever firm in whatever industry is affected, this will spill over to the banking sector of the economy in one way or the other mostly in the bank&s capital structure. Bank capital generally represents funds attained through the issuance of stock or through retaining earnings. Other factors that affect the performance of the banking industry include main sources of funds, their main uses of the funds and off-balance sheet activities that they provide (Madura J, 2008).

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The banking industry has experienced substantial changes. The industry has undergone deregulation of some aspects of it. Today, banks have considerable flexibility in the services they offer, the locations they operate and the rates they pay depositors. This flexibility is creating intense competition among banks and even between banks and other financial institutions that now offer bank services. Banks have expanded across the country by opening new branches or making acquisitions in an attempt to use their resources efficiently. Others have diversified across to capitalize on economies of scope. Bank regulators have therefore come in to manage the speed of integration and expansion in the banking industry. This regulation is needed to protect customers who supply funds to the banking system. This also attempts to enhance the safety of the banking system by overseeing individual banks. They do not attempt to manage the individual banks, but impose some discipline so that banks assuming more risks are forced to create their own form of protection against possibility that they will default (Madura, 2008).

In Kenya, commercial banks are regulated by the Central Bank of Kenya that sets and monitors both the operational and capital requirements for all commercial banks. The objective of the CBK is to ensure that a bank maintains a level of capital which:

- a) Is adequate to protect its depositors and creditors.
- b) Is commensurate with the risks associated with its activities and profits; and
- c) Promotes public confidence in the bank.

In implementing current capital requirements, the CBK requires banks to maintain a prescribed ratio of total capital to total risk-weighted assets.

Capital adequacy and use of regulatory capital are monitored regularly by management employing techniques based on the guidelines developed by the Basel committee, as implemented by the CBK for supervisory purposes (Standard Chartered Bank SCB, 2008).

Various governments mostly in the developing nations have been very sceptical at issuing trading licences to commercial banks given the nature of risks that this sector of the economy is exposed to and how its failure can affect the general economic development. In recent decades alone, a large number of countries have experienced financial risks of varying degrees of severity, and some have suffered repeated bouts of distress (Hardy D, 1988). The nature of exposure to the various risks varies from

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to country. Dickson 2000 defines risk as the things that may happen in the future. Risk

management is therefore about recognizing what the events are, how severe they may be and how they can be controlled. It is the identification, analysis and economic control of those risks that can threaten the assets or earning capacity of the enterprise.

According to Fischer and Jordan (2002), risks are those forces that contribute to variations in return ó price or dividend (interest). They classify risks into two broad categories: systematic and unsystematic risks. Systematic risks refers to that portion of total variability in return caused factors affecting prices of all securities or those forces that are uncontrollable, external and broad in their effect. Conversely, controllable, internal factors somewhat peculiar to industries and/or firms are referred to as sources of unsystematic risks. According to Hubbard Douglas (2009), financial risk is an umbrella term for any risk associated with any form of financing. Typically, in finance, risk is synonymous with downside risk and is intimately related to the shortfall or the difference between the actual return and the expected return (when the actual return is less). Both systematic and unsystematic risks must be checked by any organization before it slips into financial distress.

Brealey, Myers and Marcus (1995) define financial distress as a situation that occurs when promises to creditors are broken or honoured with difficulty. Sometimes financial distress leads to bankruptcy. Sometimes it only means skating in the thin ice. Financial distress has afflicted numerous local commercial banks, many of which have been closed down by the regulatory authorities or have been restructured under their supervision. In Kenya alone, two commercial banks were closed between 1984 and 1989. The cost of these bank failures is very difficult to estimate: much of the data not being accessible to the public while the eventual cost to depositors and/or taxpayers of most of the bank failures is substantial. A statement in the Kenyan parliament in October 1995 revealed that the CBK lost a total of Kshs. 10.2 billion (equivalent to 3.8 per cent of 1993 GDP) from frauds involving the öpolitical banksö (Economist intelligence unit, 1995). The CBK had provided Kshs. 17.8 billion (equivalent to 6.6 per cent of GDP) in liquidity support to three of the failed banks in 1992/93. This has propelled the major regulators to design several modalities called the financial risk management practices to help curb this menace.

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to the practices used by corporate finance managers
to control uncertainty in the firm's total portfolio.

Financial risk management aims to minimize the risk of loss from unexpected changes in the prices of currencies, interest rates, commodities, and equities. In the context of international accounting, financial risk management also contains an element of political, legal and cultural risk exposure to uncertainty in the outcomes of business transactions and asset transfers that comes with most international business operations. Risk management is a continuously evolving mix of science and art. Losses are inevitable, and we must keep learning from the past. The wide range of methods shows that risk managers must think long and hard about the techniques they choose. There is no right or wrong way to manage risk. Each institution needs to assess which method best suits its objectives, its business, its view of the world, and its pockets. It is important to establish good risk practices and standards, whatever risk-measurement methodology chosen.

Credit risk has been shown to be particularly large and particularly damaging for very large investment projects, so-called megaprojects. This is because such projects are especially prone to end up in what has been called the "debt trap," i.e., a situation where due to cost overruns, schedule delays, etc. the costs of servicing debt becomes larger than the revenues available to pay interest on and bring down the debt.

Damiano B (2006) defines this risk as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms. The goal of credit risk management is to maximize a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Banks should also consider the relationships between credit risk and other risks. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization.

1.2 Statement of the problem:

The banking industry recognizes that an institution needs not do business in a manner that unnecessarily imposes risk upon it; nor should it absorb risk that can be efficiently be transferred to other participants. Rather, it should only manage risks at

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ently managed there than by the market itself or by
os. In short, it should accept only those risks that are

uniquely a part of the bank's array of services. Banking is one of the most sensitive businesses in any economy since it acts as a life-blood of modern trade and commerce to provide them with the major sources of finance. Kenya is one of the key emerging markets in Africa and its banking sector consists of Commercial Banks and Microfinance Institutions, regulated by the CBK. The Banking Sector has significantly improved its performance during the last few years as more foreign banks and local banks have expanded their operations in this country and region.

As commercial banks expand and grow in size, competition and flexibility continues in terms of operations and adherence to set standards, rules and regulations. Banks therefore tend to diversify across services, regions and target markets thereby drifting away from their core values and traditional practices or businesses. With a given level of expansion, there arises a given level of credit risk since the bank may use more fund in operational aspect of its business. Pandey (2000) alludes that the degree of operating leverage (i.e. the proportion of fixed assets), general economic conditions, demand and price variations, intensity of competition, extent of diversification and the maturity of the industry. He further says that companies operating in turbulent business environment and in highly competitive markets are exposed to higher operating risk. This is further aggravated if the companies are highly capital intensive and have high proportions of fixed costs. The expansive nature of commercial banks in Kenya and the nature of businesses they do expose them to several risks. These risks may in turn make them have a higher gearing ratio that may in turn make them more vulnerable to downturns in the business since they will be forced to service their debts and promises to creditors regardless of how bad the economy is and is likely to push them to financial distress.

Previous studies have not dwelled on the financial risk management practices by commercial banks in Kenya. Waweru and Kalani (2009) for instance, did a study on the commercial banking crisis in Kenya ó causes and remedies. Nabutola W. (2004) did a study on risk and disaster management. To the best knowledge of the researcher, no known study has been done on the credit risk management practices in Kenya. It is on this basis that a survey of the credit risk management practices of commercial

This study has been propelled at surveying the credit risk in Kenya and focused on commercial banks in Kenya.

1.3 Objectives of the study:

The objectives of the study will be;

- i. To help understand the process of credit risk identification by commercial banks in Kenya.
- ii. The extent to which commercial banks in Kenya classify and monitor credit risks.
- iii. To identify the various practices adopted by the commercial banks in Kenya to managing the credit risk.
- iv. To identify methods used by commercial banks to monitor/gauge the policies adopted in iii above.

1.4 Importance of the study:

This study will be useful to the following players in the economy:

- a) Commercial banks: The study will provide information to commercial banks understand their credit risk exposure. This will in turn help them put in place the necessary policies and practices to help manage the risk.
- b) Government: The study will provide information to the government in understanding the nature of credit risk in the banking industry and this will help the government formulate positive national policies based on the framework that is relevant and sensitive to the credit risk management practices. These policies are important in helping uplift the public confidence in the financial sector of any economy
- c) Researchers/Academicians/Students: The study will provide good insight to those who want to undertake further research on area of credit risk management practices and will utilize the study as a source of secondary information.
- d) Policy makers: Policy makers in the financial industry will use this paper in understanding to what extent the banking industry is exposed to credit risks. This will help guide them when designing the best practices to adopt in case a financial institution is managing credit risk.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focuses on the review of literature related to this research. It focused on a review of past studies done on credit risk management practices of commercial banks in Kenya. Emphasis was on the categories of credit risks and the activities that commercial banks undertake to manage these related risks. This chapter also presented a review of the theories guiding the study, meaning and importance of credit risk management to commercial banks. The review also depended on theoretical literature that was books, research papers, magazines, financial reports and information from the internet.

2.2 Empirical Review

Within the last few years, a number of studies have provided the discipline into the practice of risk management within the banking industry. An insight of related studies is as follows:

Credit risk management should be linked to the organizations business strategy (KPMG, 2001). Risk strategy, which provides guidelines for the risk activities within an organization, is built around and supports the business strategy. Risk management structures should be established that clearly identify ownership, responsibilities and accountabilities for risk management. The organisation structure and incentive system should be aligned with the goals and objectives of the risk management program. Responsibilities and accountabilities for implementing the risk management program should be clear to all bank employees. Objectives, strategies and processes should be well documented and available to all stakeholders (Hill and Dinsdale, 1969).

HTM (2004) presents two common alternative structures to credit risk management. The first one involves an audit committee, established as a committee of the board, ideally with non-executive membership and chaired by an non-executive, which will be charged with supporting the appraisal officer in their responsibilities for issues of risk, control and governance and associated assurance.

ment of Risk committee. This is set up as a
gely no executive (i.e. as a Risk Assurance
committee), it may undertake functions similar to those of the audit committee.
However, if it is a forum for executive managers with significant responsibility for the
ownership and management of risk in their functions.(i.e. as risk management
committee), then the Audit Committee should retain the independent assurance role.

KPMG (2001) presents two organizational approaches to credit risk management:
centralised at the corporate level or decentralized among divisions or processes,
depending on the nature of the risks in question and the organizational preferences of
management. Centralised risk management tends to be common in cases whereby
there are risks that affect the achievement of key corporate objectives and strategies,
and significantly affect most, if not all, functions and processes (e.g. reputation).
Decentralized risk management on the other hand tends to be applied to risks that are
significant only within a particular process but, nonetheless, affect the organization's
ability to successfully implement its strategies.

Al-Tamimi and Al- Mazrooei (2007) provided a comparative study of Banks Credit
Risk Management of UAE National and Foreign Banks. This research helped them to
find that the three most important types of risks facing the UAE commercial banks
were foreign exchange risk, followed by credit risk and then operating risk. They
found that the UAE banks were somewhat efficient in managing risk; however the
variables such as risk identification, assessment and analysis proved to be more
influencing in risk management process. Finally, the results indicated that there was a
significant difference between the UAE National and Foreign banks in practicing risk
assessment and analysis, and in risk monitoring and controlling.

Hassan, M. (2009), made a study of Risk Management Practices of Islamic Banks of
Brunei Darussalam to assess the degree to which the Islamic banks in Brunei
Darussalam implemented risk management practices and carried them out thoroughly
by using different techniques to deal with various kinds of risks. The results of the
study showed that, like the conventional banking system, Islamic banking was also
subjected to a variety of credit risks due to the unique range of offered products in
addition to conventional products. The results showed that there was a remarkable

nagement by the staff working in the Islamic Banks
wed their ability to pave their way towards

successful risk management. The major risks that were faced by these banks were amongst them credit risk. A regression model was used to elaborate the results which showed that Risk Identification, and Risk Assessment and Analysis were the most influencing variables and the Islamic banks in Brunei needed to give more attention to those variables to make their Risk Management Practices more effective by understanding the true application of Basel-II Accord to improve the efficiency of Islamic Banks' risk management systems.

Koziol and Lawrenz (2008) provided a study in which they assessed the risk of bank failures. They said that assessing the risk related to bank failures is the paramount concern of bank regulations. They argued that in order to assess the default risk of a bank, it is important considering its financing decisions as an endogenous dynamic process. The research study provided a continuous-time model, where banks chose the deposit volume in order to trade off the benefits of earning deposit premiums against the costs that would occur at future capital structure adjustments. Major findings suggested that the dynamic endogenous financing decision introduced an important self-regulation mechanism.

2.3 Credit Risk

TBS (2001) defines risk as "the uncertainty that surrounds the future events and outcomes". The expression of the likelihood and impact of an event with potential to influence an organization's achievement of objectives (p8). Risk therefore is the probability that an event in the future, either bad or good, will occur.

Financial risk is associated with the way in which a company finances its activities. We usually gauge financial risk by looking at the capital structure of a firm. The presence of borrowed money or debt in the capital structure creates fixed payments in the form of interest commitments - fixed-interest payments due to debt or fixed-dividend payments on preferred stock - causes the amount of residual earnings available for common-stock dividends to be more variable than if no interest payments were required. Financial risk is avoidable risk to the extent that the managements have the freedom to decide to borrow funds. A firm with no debt

scher and Jordan, 2002). They continue to say that financing, the firm changes the characteristics of the earnings stream available to the common-stock holders. Specifically, the reliance on debt financing, called *financial leverage*, has at least three important effects on common-stock holders. Debt financing i. increases the variability of their returns ii. Affects their expectations concerning their returns and iii. Increases their risk of being ruined.

Basel II states that credit risk is one of the major financial risks that commercial banks face. It is described as the risk to have losses because counterparty is not capable to carry out its obligations according to the terms of the agreement. Sometimes losses occur even when the counterparty does not breach the contract, but there are certain signs showing increasing probability of borrower's insolvency (e.g. downgrade in credit ratings of the borrower).

Credit risk is one of the key risks for the banks as failure to properly evaluate it may lead to insolvency and bankruptcy. Aggregated stress testing of Lithuanian banks results of the yr. 2002 showed that banks consider credit risk to be the most important risk, constituting over 62% of possible losses.

2.3.1 Credit Risk Identification

Crockford (1986) argues that after establishing the categories, the next step in the process of managing credit risk is to identify it as a potential risks. Credit risk are about events that, when triggered, cause problems. Hence, credit risk identification can start with the source of problems, or with the problem itself.

1. **Source analysis** ó credit risk sources may be internal or external to the system that is the target of risk management. Examples of risk sources are: stakeholders of a project, employees of a company or the weather.
2. **Problem analysis** ó credit risk is related to identified threats. For example: the threat of losing money, the threat of abuse of privacy information or the threat of accidents and casualties. The threats may exist with various

The chosen method of identifying credit risk may depend on culture, industry practice and compliance. The identification methods are formed by templates or the development of templates for identifying source, problem or event. Common credit risk identification methods are:

- i. **Objectives-based risk identification** - Organizations and project teams have objectives. Any event that may endanger achieving an objective partly or completely is identified as risk.
- ii. **Scenario-based risk identification** - In scenario analysis, different scenarios are created. The scenarios may be the alternative ways to achieve an objective, or an analysis of the interaction.
- iii. **Taxonomy-based risk identification** -The taxonomy in taxonomy-based risk identification is a breakdown of possible risk sources.
- iv. **Common-risk checking** - In several industries, lists with known risks are available. Each risk in the list can be checked for application to a particular situation.
- v. **Risk charting** - This method combines the above approaches by listing resources at risk.

2.3.2 Credit Risks Classification

There are various risk categories that an organization can be exposed to. Vedpurshwar (2001) classifies these into three categories. Firstly, there are the hazard risks, which refer to natural hazards, which include accidents, fire etc. Secondly, there are operational risks that cover systems, processes and people. Thirdly, there are financial risks, which include market risks, liquidity risks, solvency risks etc. Globalisation and deregulation in financial markets, combined with increased sophistication in financial technology, have introduced more complexities into the activities of banks and therefore their risks profiles. These reasons underscore banks and supervisors' growing focus upon the identification and measurement of some of the following latter category credit risks in the banking industry:

risk of loss due to failure of an entity to honour its obligations or other assets as contractually agreed. Madura

J, (2008) encapsulates that international banks that engage in large currency transactions are exposed not only to exchange rate risk as a result of their different currency positions, but also to settlement risk of a loss due to settling their transactions.

b). Sovereign risk ó Duffie D. and Singleton K (2003) defines sovereign risk as the risk of a government becoming unwilling or unable to meet its loan obligations, or reneging on loans it guarantees. The existence of sovereign risk means that creditors should take a two-stage decision process when deciding to lend to a firm based in a foreign country. Firstly one should consider the sovereign risk quality of the country and then consider the firm's credit quality.

Five macroeconomic variables that affect the probability of sovereign debt rescheduling are: Debt service ratio, Import ratio, Investment ratio, Variance of export revenue, Domestic money supply growth

The probability of rescheduling is an increasing function of debt service ratio, import ratio, variance of export revenue and domestic money supply growth. Frenkel, Karmann and Scholtens (2004) also argue that the likelihood of rescheduling is a decreasing function of investment ratio due to future economic productivity gains. Saunders argues that rescheduling can become more likely if the investment ratio rises as the foreign country could become less dependent on its external creditors and so be less concerned about receiving credit from these countries/investors

c). Counterparty risk ó Brigo D and Pallavicini A. (2007) defines counterparty risk, otherwise known as default risk, as the risk that an organization does not pay out on a bond, credit derivative, credit insurance contract, or other trade or transaction when it is supposed to. Even organizations who think that they have hedged their bets by buying credit insurance of some sort still face the risk that the insurer will be unable to pay, either due to temporary liquidity issues or longer term systemic issues.

Large insurers are counterparties to many transactions, and thus this is the kind of risk that prompts financial regulators to act, e.g., the bailout of insurer AIG.

terparty risk can be affected by wrong way risk,
factors be correlated in the most harmful direction.

Including correlation between the portfolio risk factors and the counterparty default into the methodology is not trivial.

2.3.3 Credit Risk Management Practices.

The term risk management can mean many things, but in banking business, it involves identifying events that could have adverse financial consequences and thus taking actions to prevent and/or minimize the damage caused by these events. Eugene and Daves (2004) enumerates various reasons why organisation needs to manage credit risks;

- i. Debt Capacity - Risk management can reduce the volatility of cash flows and this decreases the probability of bankruptcy. Firms with lower operating risk can use more debt and this can lead to higher stock prices due to interest tax savings.
- ii. Maintaining the optimal capital budget overtime - Firms are reluctant to raise external equity due to high floatation costs and market pressure. This means that the budget must generally be financed with debt plus internally generated funds mainly retained earnings and depreciation.
- iii. Financial distress - This can range from simply worrying stockholder to higher interest rates on debt, to customer defection, to bankruptcy - is associated with having cash flows fall below expected levels. Credit risk management can reduce the likelihood of low cash flows hence of financial distress.
- iv. Comparative advantages in hedging - Most investors cannot hedge efficiently as a company. First firms generally have lower transaction costs due to a larger volume of hedging activities. Second, there is the problem of symmetric information - managers know more about the firms risk exposure than outside investor hence managers can create hedges that are more effective. Third, effective risk management requires specialized skills and knowledge that firms are more likely to have.
- v. Borrowing costs - Firms can sometimes reduce input cost, especially the interest rate on debt through the use of derivative instruments called swap. Any such cost reduction adds value to the firm.

th volatile earnings pay more taxes than stable
ent of tax credits and the rules governing corporate

loss carry forward and carry backs. More-over, if volatile earnings lead to
bankruptcy, and then the tax loss carry forwards are generally lost. Therefore,
our tax system encourages risk management to stabilize earnings.

- vii. Compensation systems 6 Many compensation systems establish öfloorsö and
öceilingsö on bonuses, and reward managers for meeting targets.

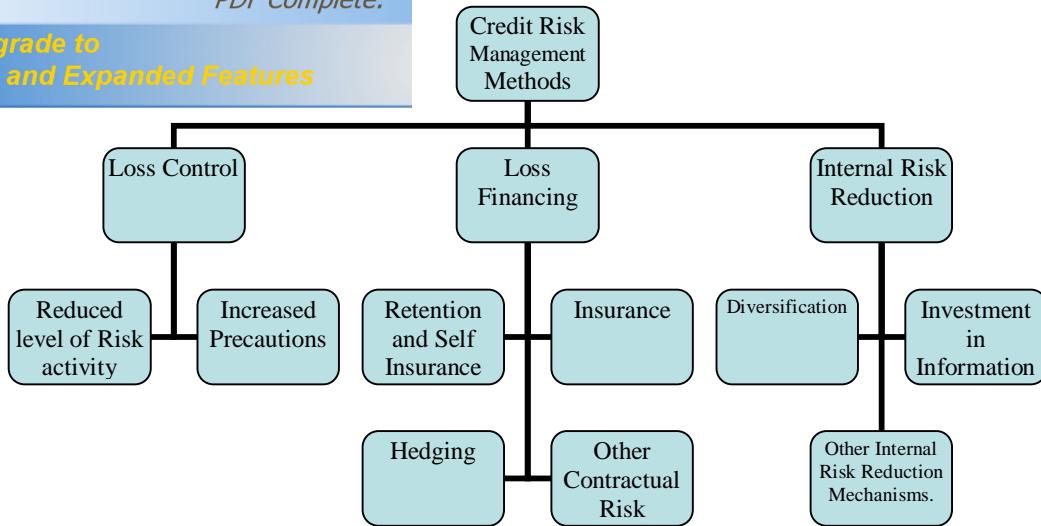
Understanding these motives is important because they provide insights into which
risks should be hedged and how a firmsøhedging operations should be organized.
Harrington and Niehaus (2004) argue that it must however be noted that regardless of
the type of risk being considered, the credit risk management process involves several
key steps:

- i. Identify all significant risks.
- ii. Evaluate the potential frequency and severity of losses.
- iii. Develop and select methods for managing the credit risk.
- iv. Implement the credit risk management methods chosen.
- v. Monitor the performance and suitability of the credit risk management
methods and strategies on an ongoing process.

It is from the above that the organization will come up with the best credit risk
management practice which are broadly categorized as below:

Figure 1: The Major Risk Management Mechanisms.

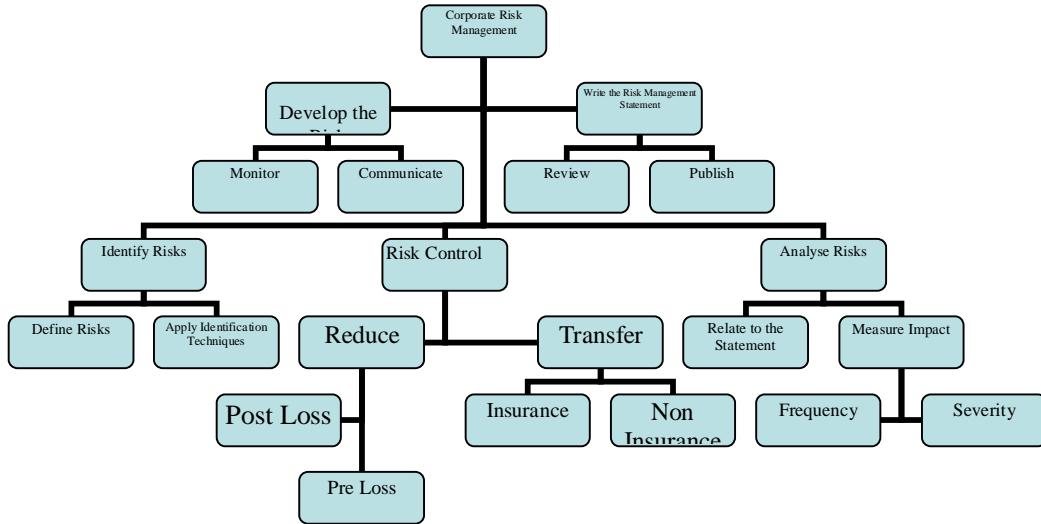
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Source: Dickson 2000: Risk Management

The credit risk management process therefore takes the following process:

Figure 2: The Risk Management Process:



Details of how credit risks are managed are outlined below:

SCB (2008) state that the credit risk category is managed through regular analysis of the ability of borrowers and potential borrowers to meet interest and capital repayment obligations and by changing lending limits where appropriate. Exposure to credit risk is also managed in part by obtaining collateral against loans and advances

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over property, other registered securities over assets

Brigo, Damiano and Pallavicini (2007) argue that lenders mitigate credit risk using several methods:

- i. Risk-based pricing: Lenders generally charge a higher interest rate to borrowers who are more likely to default, a practice called risk-based pricing. Lenders consider factors relating to the loan such as loan purpose, credit rating, and loan-to-value ratio and estimates the effect on yield (credit spread).
- ii. Covenants: Lenders may write stipulations on the borrower, called covenants, into loan agreements by either Periodically reporting its financial condition, Refraining from paying dividends, repurchasing shares, borrowing further, or other specific, voluntary actions that negatively affect the company's financial position and Repaying the loan in full, at the lender's request, in certain events such as changes in the borrower's debt-to-equity ratio or interest coverage ratio
- iii. Credit insurance and credit derivatives: Lenders and bondholders may hedge their credit risk by purchasing credit insurance or credit derivatives. These contracts then transfer risk from the lender to the seller (insurer) in exchange for payment. The most common credit derivative is the credit default swap.
- iv. Tightening: Lenders can reduce credit risk by reducing the amount of credit extended, either in total or to certain borrowers. For example, a distributor selling its products to a troubled retailer may attempt to lessen credit risk by reducing payment terms from *net 30* to *net 15*.
- v. Diversification: Lenders to a small number of borrowers (or kinds of borrower) face a high degree of unsystematic credit risk, called concentration risk. Lenders reduce this risk by diversifying the borrower pool.
- vi. Deposit insurance: Many governments establish deposit insurance to guarantee bank deposits of insolvent banks. Such protection discourages consumers from withdrawing money when a bank is becoming insolvent, to avoid a bank run, and encourages consumers to holding their savings in the banking system instead of in cash.

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2.4.1 Importance of Credit Risk Management

Dickson (2000) enumerates several aspects of the importance of credit risk management reports to the organization. He encapsulates that these reports represent excellent public relations. It is an opportunity for credit risk department to put forward a good image of its functions and the work of its department. This is useful as so much of the year will have been spent dealing with people when they have had some loss or other traumatic experience.

The second importance of these reports is that it is for the very discipline of having to carry out the work necessary in the preparation of the report may well reveal information which may well reveal information which may otherwise have been hidden. Preparing the report may prove to be of value in itself. In these reports, Dickson brings out some of the important features of financial risk management, which he outlines as follows:

- i. It means that the long term objectives of risk management are thought out by the company. The company has declared what it believes to be optimum approach given the information it has. In this way the company is seen to be positive in its attitude to risk rather than just responsive when needs must.
- ii. Declaring a philosophy focuses attention on the work of the risk management department. The company is likely to have a declared philosophy in a number of areas from marketing to product design, investment to diversification and placing a risk management philosophy alongside all these others could heighten the profile of risk management and bring with it an increased awareness of risk itself.
- iii. The philosophy can also act as a useful benchmark against which to measure the effectiveness of the risk manager and his department. Where no risk philosophy has been made known then it would be very difficult for the risk manager or his superiors to know if he is performing a satisfactory job. The task of measuring effectiveness would become very subjective and personal.

sent the corporation's view of the management of long term planning is to take place and the management of risk evolve within the company as a whole. A permanent philosophy is not permanent in the sense that it is inflexible but in the sense that it is the corporate view, outliving the employment of any one individual.

- v. Generating the risk philosophy should have involved a number of executives within the organisation. The work could represent good public relation for the risk management department.

2.4.2 Credit Risk Monitoring

L Bhole and J Mahakud (2009) alludes that risk management in bank operations includes risk identification, measurement and assessment, and its objective is to minimize negative effects risks can have on the financial result and capital of a bank. Banks are therefore required to prescribe procedures for risk identification, measurement and assessment, as well as procedures of risk management. The risks to which a bank is exposed in its operations market risks, credit risks, liquidity risks, exposure risks operational risks, reputational risks and strategic risks. These risks are highly interdependent. Events that affect one area of risk can have ramifications for a range of other risk categories. This is why banks become circumspect to improve their ability to identify measure, monitor and control the overall risk.

Madura (2008) argues that the greatest failure by commercial banks results from associated risks. Bank regulators typically conduct an on-site examination of each commercial bank at least once a year. During this examination, regulators assess the bank's compliance with existing regulations and its financial condition. In addition to on-site examinations, regulators periodically monitor commercial banks with computerized monitoring systems, based on data provided by the banks on a quarterly basis.

Regulators monitor banks to detect any serious deficiencies that might develop so that they can correct the deficiencies that might develop so that they can correct the deficiencies before the bank fails. The more failures that can prevent. The more confidence the public will have in the banking industry. The public gauge the

on the comment of the regulator which normally rate characteristics, which together comprise the CAMELS ratings, so named for the acronym that identifies the six characteristics; Capital adequacy, Asset quality, Management, Earnings and Sensitivity.

Each of the CAMELS characteristics is rated on a 1-to-5 scale, with 1 indicating outstanding and 5 very poor. A composite rating is determined as the mean rating of the six characteristics. Banks with a composite rating of 4.0 or higher are considered to be problem banks. They are closely monitored, because their risk level is perceived as very high.

Banks have proven business continuity and disaster preparedness plans, to assure the immediate continuity of all essential operations in the aftermath of a disaster and the eventual continuity of all other operations. These plans are continuously updated and tested to assure ongoing readiness.

2.5 Conclusion

The process of Credit Risk Management practices of commercial banks in Kenya includes understanding the risk, identifying the risk, classifying it, analyzing it and then monitoring the effectiveness of the practices put in place to manage it. These processes have proved helpful in managing the various categories of risks in the developed world. However, despite the numerous roles that commercial banks play in Kenya, none of the reviewed studies has researched on this. This study aims at filling the gap by evaluating the credit risk management practices of commercial banks in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter outlines the research design and methodology followed in conducting this study. It describes the research design, population of the study, sample size, sample frame, data collection methods and data analysis and presentation.

3.2 Research design

The study adopted a descriptive survey method in trying to establish the extent to which commercial banks in Kenya undertake credit risk management. The survey method involved asking the participants questions on what risks affect their portfolios and on the best practices they adopt to manage the risks. Survey method is of great importance especially when a researcher is collecting data on a phenomena which cannot be observed directly. The advantage of it is that it allows for easy and economical way of collecting data especially when using questionnaires, highly effective especially where large amounts of data is to be collected from a sizeable population.

3.3 Population of the study

The population of interest in this study consisted all commercial banks listed by the CBK. According to CBK website, there were 43 registered commercial banks in Kenya involved in handling deposits. Out of these, only 10 are listed in the NSE. This population is thus the list in appendix II.

3.4 Sampling

The sample was drawn from the population of commercial banks licensed by the CBK. A half of the population was targeted. This translated to about 23 commercial banks. This sample size was drawn mainly from commercial banks operating within Kisumu town. The reason why this sampling was done this way was to ensure lower

greater speed of data collection and availability of
Pamela, 2003).

Simple random sampling was used. This will help minimize bias and simplify analysis of results. The main advantage of using this method is that it is simple and easy to use. It is also convenient when a smaller sample is to be studied. The sensitivity of the study to some organizations in divulging information and the fact that some organizations are far-flung (accessibility) made convenient this type of sampling applicable for this study (Cochran G, 1977).

3.5 Data collection methods

The study was facilitated by the use of both primary and secondary data from the following sources:

- a) Primary source: The study used structured questionnaires to elicit a wide range of baseline information about credit risk management practices in commercial banks. Target respondent was staff in various positions within the banking industry. The purpose of this was diverse including seeking and understanding the relevant factors. The questionnaire was divided into three (3) parts. Part A aimed at gathering background information about the respondent. Part B aimed at getting the responses on the categories of risks while part C focused on the main credit risk management practices adopted by these commercial banks.
- b) Secondary source: This mostly involved the previous works from related articles including; published financial reports of the commercial banks, Data relating to these commercial banks available with the CBK annual reports on their performance.

3.6 Data Analysis

Data analysis aimed at fulfilling the research objectives and provided answers to research questions. The choice of analysis procedures therefore depended on how well the techniques satisfactorily matched the objectives of the study to the scale of measurement of the variables in question. Analysis of this paper involved both the

iques. The content analysis was deemed highly
qualitative data. Content analysis has potential

of generating more detail from data. This method of analysis has been successful in similar studies including Njau (2002) and Kandie (2001).

A regression model was applied in estimating the relationship between one dependent variable and the five explanatory variables. The model is as follows:

$$\text{CRMP} = f(\text{URM}, \text{CRI}, \text{CRAA}, \text{CRM}, \text{CRA}) + e$$

Where:

CRMP = Credit Risk Management Practices;

URM = Understanding Risk and Risk Management;

CRI = Credit Risk Identification;

CRAA = Credit Risk Assessment and Analysis;

CRM = Credit Risk Monitoring and

CRA = Credit Risk Analysis

+ e = error term

Quantitative analysis involved editing, tabulation and coding of data. The editing process involved correcting and inspecting each questionnaire to ensure completeness, comprehensiveness and consistency. Data was then coded and entered into Statistical Package for Social Sciences (SPSS) version seventeen (17). SPSS offers a user friendliness that most packages can not offer. It is popular because many data sets are easily loaded into it and other programs can easily import its files. I also used frequencies tables, graphs, pie charts, bar charts and histograms mostly for data presentation. This ensured that the gathered information is clearly understood.

3.7 Variables of the Study

This study is mainly related to the credit risk management practices being followed by commercial Banks in Kenya. The questionnaire is used as the main tool to collect primary data and check the extent to which the risk management practices are being carried upon by the commercial banks in Kenya. The six important aspects of risk management process are categorized as one dependent and five explanatory variables.

ent variable of this study is *credit risk management*.

k management practices and specifically their

degree of usage within the commercial banks of Kenya.

Independent or Explanatory Variables: The explanatory variables include the five main aspects of credit risk management. These variables are as follows:

- a. Understanding Credit Risk and Credit Risk Management.
- b. Credit Risk Identification
- c. Credit Risk Assessment and Analysis
- d. Credit Risk Monitoring
- e. Credit Risk Analysis

3.8 Data Reliability and Validity.

Joppe (2000) defines reliability as the extent to which results are consistent over time and an accurate representation of the total population under study and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable. He also argues that validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. In other words, does the research instrument allow you to hit "the bulløs eye" of your research object?

Piloting of the questionnaire was carried out to test the validity and reliability of the instruments. This study used content validity because it measured the degree to which the sample of the items represented the content that the test was designed to measure. The questionnaire was given out to some local/branch bank officers at the said banks. This was administered on the basis of ödrop and pick laterö or picked immediately depending on the availability of the officers. From this pilot study, the researcher was be able to detect questions the needed editing and those that were ambiguous. Corrections were made and a final questionnaire was printed and used for data collection.

CHAPTER FOUR PRESENTATION AND INTERPRETATION

4.1 Introduction.

This chapter describes and analyses the various credit risk management practices that commercial banks have adopted in Kenya. This data was collected through questionnaires. The findings are presented in sections that cover the background of the bank and the profile of the respondents, classification/identification of the various credit risks, management practices and how the various banks measure/gauge the effectiveness of the various methods used to measure the various risks. The qualitative data was organized in broad themes that answered the research objectives. Qualitative data was also organized in frequency counts and converted into percentages for clear presentation.

4.2 Respondents Background information and profile

Questionnaires were sent out to 22 licensed commercial banks operating in Kisumu. A total of 18 questionnaires were received and analyzed. These questionnaires represented 78% of what was targeted which is considered to be a reasonably high response rate. Characteristics of the respondents are described in the ensuing sections.

4.2.1 Country of Incorporation and Nature of Operation.

The target banks were categorized using the country of first incorporation and the nature of operation. The results of the nature of country of first Registration were as follows;

Table: 4.2.1.a: Country of first Incorporation

Area of Incorporation	Frequency	Percent
Local	11	61
Foreign	7	39
Total	18	100

Source: Research data

Results indicate that of the eighteen banks that responded, 11(61%) were locally incorporated in Kenya where as 7 (39%) were incorporated in foreign countries.

as follows;

ion

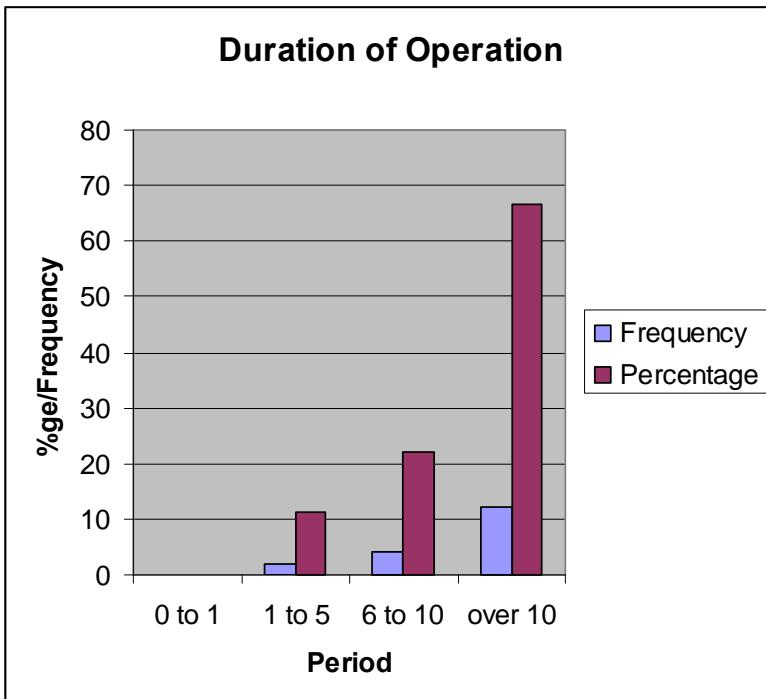
Nature of Operation	Frequency	Percentage
Regional	7	39
Local	6	33
Multinational	5	28
Total	18	100

Source: Research data

Results indicate that of the eighteen banks that responded, 7(39%) limits their operations within the region, 6 (33%) operates locally while 5(28%) are multinationals.

4.2.2 Duration of Operation:

In terms of duration of operation, the research found out that none of the respondents has operated in the country for less than one year, 2 (11.1%) have operated between 1 to five years, 4 (22.2%) have operated for between 6 to 10 years while 12(66.7%) have operated for more than 10 years.



Source: Research data.

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Majority of the respondents were supervisors taking 72% (13) while managers were 28% (5). None of the directors of the various banks filled the questionnaires.

Position of Respondents

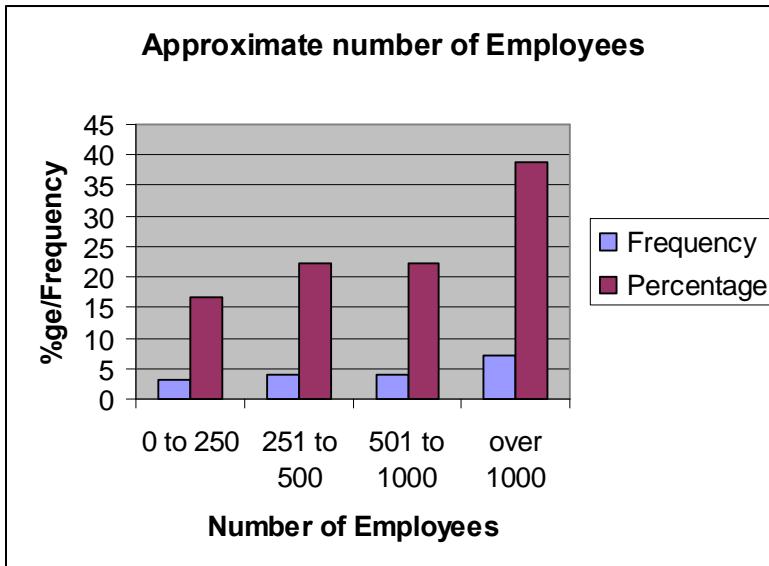
Table 4.2.3: Ranks of Respondents

Rank	Frequency	Percentage
Supervisor	13	72
Manager	5	28
Director	0	0
Total	18	100

Source: Research data

4.2.4 Number of Employees

From the chart below, it can be noted that three banks (16.7%) had less than 250 employees, four banks (22.2%) had between 251 to 500 employees which also applies to those that had between 501 to 1000. Majority of the banks (38.9%) that responded had over 1000 employees.



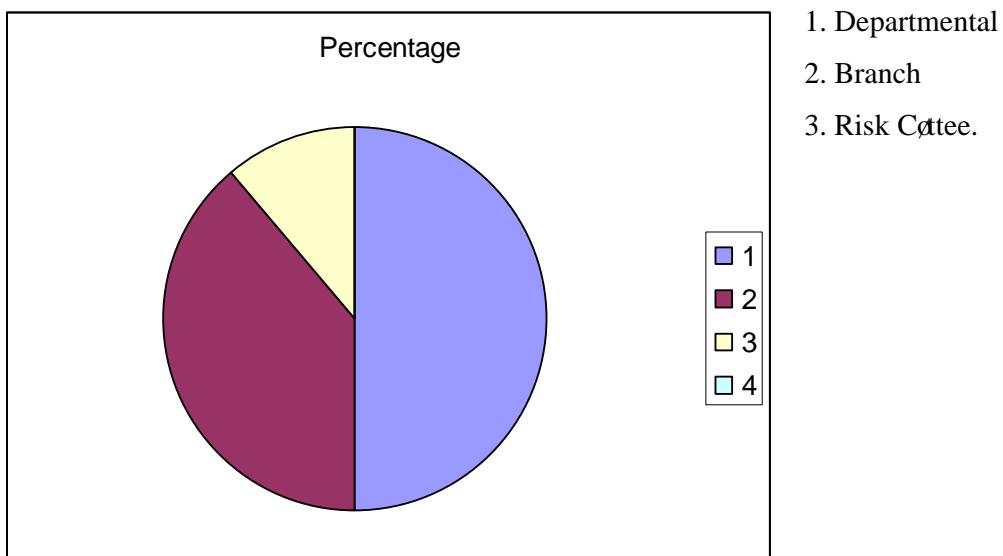
Source: Research Data

of Risks

Who in the banks are responsible and involved in the identification and classification of the various credit risks. These individuals were required to indicate the particular methods they use to identify/classify the risk after which they were to identify the extent to which the various categories of credit risks affect them. These findings were summarized in Tables 4.3.1, 4.3.2 and 4.3.3

4.3.1 Level of Identifying Credit Risk

The research sought to determine the level at which commercial banks identify and classify credit risks. The results were as below



Source: Research data

Results indicate that 50% (9) out of the 18 banks that responded identify and classify credit risks at the branch level, 38.9% (7) identify and classify credit risks at departmental level while 11.1% (2) identify and classify the risk at the Risk committee level. None of the respondents (0%) indicated that credit risk is identified and classified at the Board level of the bank.

4.3.2 Risk identification Method

The banks were required to indicate the extent to which they rely on various risk identification criteria. A Likert scale was used, with the largely used method scoring 4 and the method not used at all scoring zero (0). These sources were analyzed by computing mean and standard deviation. Their responses were as follows;

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Method

Method	Mean	Standard Deviation
Objective-based	4.8	0.422
Scenario-based	4.1	1.197
Taxonomy-based	4.3	0.949
Common checking	4.6	0.699
Charting	4.6	0.6992

Source: Research Data

From the above results, objective-based is the most commonly used method of credit risk identification with a mean score of 4.8 followed by common risk checking (4.6), scenario-based method (4.6), taxonomy-based (4.3) and finally scenario-based at 4.1. The standard deviation were respectively 0.422, 0.699, 0.6992, 0.949 and 1.197.

Standard deviations for most of these aspects are relatively low at less than one. The findings are an indication that commercial banks rely a lot on the methods listed above to identify the various credit risks.

4.3.3 Credit Risk Categories

This subsection represents the results of the various categories of credit risks affecting commercial banks. It also indicates the extent to which commercial banks are affected by the stated category of credit risk. A Likert scale was also used, with the risk category affecting the bank to a large extent scoring 4 and the risk category not affecting the bank at all at all scoring zero (0). These sources were analyzed by computing mean and standard deviation. The responses gave the following results;

Table 4.3.3: Risk Categories

Credit Risk	Mean	Standard Deviation
Settlement Risk	3.9	1.397
Counterparty Risk	3.6	1.265
Sovereign Risk	2.9	1.287

Source: Research Data

nt risk affect most commercial banks to the largest followed by counterparty risk (3.6) with sovereign risk being the least with a mean of 2.9. The standard deviation computed from the responses of more than one i.e. 1.397, 1.265 and 1.287 respectively. High standard deviation values indicate a lack of uniformity/consistency in the use of practices under consideration.

4.4 Credit Risk Management Practices

A number of practices are adopted and used by commercial banks towards dealing with credit risks. Commercial banks like any other organizations use different methods and strategies to wade through the tough times of the economy brought about by the harsh credit risks. The researcher was interested in determining the extent to which various issues/variables are used by the commercial banks. This was measured both in way of a three-point and five-point Likert scale, where respondents were required to indicate the level or the extent to which they applied the particular risk management practice.

The range was öVery large extent (5)ö to öNo extent at all (1)ö. The scores of öNo extentö and öSmall extentö have been taken to present a variable which is used to a small extent (S.E) by the bank(Equivalent to a mean of 2.5 on the Likert scale(0 = S.E being more than 2.5). The scores to öTo some extentö have been taken to represent a variable that is used to a moderate extent (M.E.) by the commercial bank (equivalent to a mean score of 2.5 to 3.5 on the continuous Likert scale; 2.5 = M.E. less than 3.5). The score of both öLarge Extentö and öVery Small Extentö have been taken to represent a variable, which is used to a large extent (L.E.) in the market (equivalent to a mean score of 3.5 to 5 on a continuous Likert scale; 3.5 = L.E being less than 5.0). A standard deviation of more than one implies a significant difference in the extent which the variable is used by the commercial bank and vice versa.

4.4.1 Policy Formulation

Responsibility is an important aspect in any organization. It ensures that people take charge of any form of scenario or aspect. It for this course that the bank can be able to trace the source of any problem that may culminate into a loss to the organization. The respondents were therefore asked to indicate who in the bank is responsible for

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risk management practice. The results indicated that 18(100%) of the banks indicated that these policies are formulated by the Risk Committee which represented 11 of the respondents. 5(27.8%) indicated that these policies are formulated by the Board of Directors while 2 (11.1%) indicated that the Head Office does formulate these policies. None of the respondents (0%) indicated any involvement by the branch in formulating these policies.

Table 4.4.1: Policy Formulation

Level	Frequency	Percentage
Board of Directors	5	27.8
Head Office	2	11.1
Risk Committee	11	61.1
Branch Level	0	0
Total	18	100

Source: Research Data.

4.4.2 Approved Risk Management Policy

In terms of approved risk management policies, 18(100%) of the banks indicated and admitted that they have formally approved credit risk management policies.

Table 4.4.2: Approved Risk Management Policy

Formally approved Policies	Frequency	Percentage
No	0	0
Don't Know	0	0
Yes	18	100
Total	18	100

Source: Research Data

4.4.3 Approval of Risk Policy

The study also sought to know who is involved in the approval of the set credit risk policies. The results deduced from the study revealed the below;

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Policies

	Frequency	Percentage
Non Executive Directors	1	5.5
Independent Directors	3	16.7
Chair of the Board	5	27.8
Chief Executive Officer	0	0
Executive Directors	9	50
Total	18	100

Source: Research Data

Results indicate that 1(5.5%) of the banks indicated that their credit risk policies are approved by the Non executive Directors, 3(16.7%) done by Independent Directors, 5(27.8%) by the Chair of Board of Directors, 0(0%) by the Chief Executive Officer while a majority of 9(50%) indicated that their credit policies are approved by the Executive Directors. The research also sought to know who sits in the Risks committee in which a majority indicated risk directors and departmental risk officers.

4.4.4 Frequency of Meetings

The study also sought to know how frequent the members of the risk committee holds their meetings.

Table 4.4.4: Frequency of Meetings

Duration	Frequency	Percentage
Monthly	13	72
Quarterly	5	28
Bi-annually	0	0
Annually	0	0
Total	18	100

Source: Research Data

4.4.5 Validation Processes

Respondents were asked to indicate the validation processes they apply in their respective banks.

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Validation Method	Mean	Standard Deviation
External audit	2.4	0.843
Risk Management Reviews	2.7	0.483
Management Certification	2.2	0.632
Internal Audit	2.9	0.316
Regulatory Compliance Certification	2.9	0.316
Control Risk Self Assessment	2.8	0.422
Consultant Reviews	1.7	0.823
Independent Reviews	1.7	0.823

Source: Research Data

From the results deduced from the above table, it can be observed that in terms of validation methods, internal audit, regulatory compliance certification, control risk self assessment and risk management reviews had the highest mean scores of 2.9, 2.9, 2.8 and 2.7 respectively and standard deviations of 0.316, 0.316, 0.422 and 0.483 respectively an indication that these are popular methods used by the commercial banks. External audit, management certification, consultant reviews and independent agency rating had the least mean scores of respectively 2.4, 2.2, 1.7 and 1.7 and standard deviations of 0.843, 0.632, 0.823 and 0.823 respectively. Despite the respondents indicating less usage of the last four above, their standard deviations were less than one meaning that they were still significant in the validation of the risks.

4.4.6 Guidelines Adopted

The respondents were also required to indicate the guidelines they refer to when formulating their credit risk management practices. Their responses were that all the commercial banks that responded refer to both Central Bank of Kenya and Basel II Guidelines when formulating their policy guidelines. None of the commercial banks reported referring to the Parliamentary Guidelines when formulating their policies.

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hat commercial banks take to manage the various credit risks was a core aspect of my study. The study therefore sought to understand some of these actions that these have undertaken or are undertaking to manage the credit risks.

From these analyses, it emerges that securitization is the most commonly used method used in managing credit risks with a mean score of 4.7. commercial banks also rely a lot on covenants/agreements (4.5), competency based staff recruitment(4.3), credit referencing (4.11),credit insurance/derivatives(4.1), use of software based techniques (4.0) and staff training (4.0).

Table 4.4.7: Specific Actions taken

Specific action	Mean	Standard Deviation
Credit insurance and Derivatives	4.1	1.287
Covenants/Agreements	4.5	0.707
Reduction on Credit Extended	3.5	1.080
Risk Based Pricing	3.56	1.130
Diversification	3.1	0.876
Deposit Insurance	3.3	1.252
Staff Training	4.0	1.054
Securitization	4.7	0.483
Credit Referencing	4.11	0.782
Staff Rotation	2.9	0.568
Competency based staff Recruitment	4.3	1.059
Use of Software based Techniques	4.0	0.667

Source: Research Data

4.4.8 Monitoring Method

Further analysis was done on the extent to which the various commercial banks targeted depended on various predetermined techniques in gauging or monitoring the success or failure of the above-discussed policies. The respondentsø feedback on the various monitoring methods are summarized in the below table (4.4.8).

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	Mean	Standard Deviation
Capital	3.2	1.814
Adequacy	2.8	1.317
Asset Quality	3.4	1.578
Management	3.3	1.337
Earnings	3.4	1.430
Sensitivity	3.3	1.160

Source: Research Data

The highest mean score was realized from Earnings and Asset Quality with average scores of 3.4. This is an indication that commercial banks to a large extent use both Earnings and Asset Quality to monitor or gauge the success of the policies adopted towards the management of credit risks. Management and Sensitivity followed with both mean scores of 3.3. Capital was fifth with 3.2 while Adequacy reported the least mean score of 2.8. This comparatively indicates that Adequacy was the least used method by all the commercial banks that responded.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of the findings from the analysis of the data, conclusions reached as well as the recommendations there-of. The chapter concludes with limitations to the study, and suggestions for further study.

5.2 Summary of the study findings

The study utilized the explanatory study design where the objectives were to find answers to four questions namely; understand the process of credit risk identification by commercial banks, the extent to which commercial banks classify and monitor credit risks, to identify the various practices that the commercial banks adopt in managing the credit risks and analyze how these commercial banks monitor/gauge the success of the various policies adopted.

The findings of the study indicate that most commercial banks have laid down policies to refer to in identifying credit risks and therefore, have clear-cut methods for their identification. Most commercial banks identify credit risks at departmental level (50%) with most of them relying on objective-based risk identification method. Only six (6) of the banks that responded indicated use of scenario-based risk identification method. However, it is worth noting that every bank relied on more than two parameters or methods in identifying the varying credit risks. The research findings also show that the banks considered settlement risk as affecting their portfolios to the largest extent. However, the level/extent to which the various credit risks affected these commercial banks was quite low given the low mean scores and high standard deviation values computed.

Commercial banks have their core risk policy formulation done by the risk committee with the approval of the same done mostly by the executive directors who meet on a monthly basis. The effectiveness of these policies is then validated by the use of

se commercial banks preferring to use both internal certification. There seemed to be a consensus in the extent to which the commercial banks use the validation methods. This was evidenced by the lack of significant differences in the standard deviations that were mostly less than one. All commercial banks conceded referring to Central Bank of Kenya and Basel ii Guidelines when formulating the above practices.

In terms of the extent to which commercial banks apply different actions on credit risks, the study reported that commercial banks use securitization (4.7). All the commercial banks that responded to a large extent used securitization. This explains the reason why almost all commercial banks are diversifying their businesses into asset finance.

The findings of the study also indicated that most of the banks relied on the levels of earnings to gauge and monitor the extent to which credit risk was managed during that particular duration (financial year). Knowing the success of a policy is an important element in management mostly in the banking industry. However, most of the commercial banks that responded indicated usage of the credit risk monitoring methods to small extent. This was evidenced by the lack of significant differences in the standard deviations that were mostly more than 1 (one).

5.3 Conclusions and Recommendations

For most commercial banks, loans are the largest and most obvious source of credit risk; however, other sources of credit risk exist throughout the activities of a bank, including in the banking book and in the trading book, and both on and off the balance sheet. Banks are increasingly facing credit risk (mostly counterparty risk mean 3.9) in various financial instruments other than loans, including acceptances, interbank transactions, trade financing, foreign exchange transactions, financial futures, swaps, bonds, equities, options, and in the extension of commitments and guarantees, and the settlement of transactions. The research findings indicate the extent of credit risk management in most commercial banks is above average.

Additionally, there are well formulated practices to guide the banks in the design and

agement policies. This is also backed by strong committees.

The sensitive nature of this industry calls for checks and balances in all aspects of its operation. However, the research findings indicated that the extent of use of credit risk monitoring methods is quite low. The goal of credit risk management is to maximize a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Banks should also consider the relationships between credit risk and other risks. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization.

Since exposure to credit risk continues to be the leading source of problems in banks world-wide, banks and their supervisors should be able to draw useful lessons from past experiences. Banks should now have a keen awareness of the need to identify, measure, monitor and control credit risk as well as to determine that they hold adequate capital against these risks and that they are adequately compensated for risks incurred (Basel ii Committee 2002).

While the exact approach chosen by individual supervisors and banks in general will depend on a host of factors, including their on-site and off-site supervisory techniques and the degree to which external factors are also used in the supervisory. Supervisory expectations for the credit risk management approach used by individual banks should be commensurate with the scope and sophistication of the bank's activities. For smaller or less sophisticated banks, supervisors need to determine that the credit risk management approach used is sufficient for their activities and that they have instilled sufficient risk-return discipline in their credit risk management processes.

5.4 Study Limitations

The major limitation encountered was the rigidity, inflexibility and unwillingness by the commercial banks to give out information pertaining to their credit risk management practices. Most of the banks approached cited strict confidentiality on



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aining to the bank with some referring the researcher
em from releasing such information.

5.5 Suggestions for further Study

The study focused on understanding the credit risk management practices of commercial banks in Kenya. Similar research should be replicated with other risks that affect the banking industry as the findings/results will greatly forewarn the players in this sensitive industry to take great care as they seek to grow, expand and at the same time win the confidence of their customers.

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DIX 1: QUESTIONNAIRE

PART A

1. Name of Commercial Bank _____
2. Where registered/incorporated
 - Local (Kenyan) - Foreign(Outside Kenya) - Other_____
3. Nature of Operation
 - a). Regional
 - b). Local
 - c). Multinational
 - d). Other
4. How long has the bank been in operation in Kenya?
 - a). Less than 1 year
 - b). Between 1 and 5 years
 - c). Between 6 and 10 years
 - d). Over 10 years
5. Is the bank listed in NSE. If Yes, for how long has it been listed?
 - a). Less than 1 year
 - b). Between 1 and 5 years
 - c). Between 6 and 10 years
 - d). Over 10 years
6. Please indicate your rank in the bank
 - Supervisor
 - Manager
 - Director
7. Please indicate the approximate number of staff employed by your Bank_____

PART B

Classification of Credit Risk;

1. At what level does your bank identify/classify Credit Risk?
 - Branch Level
 - Departmental Level

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2. Who are involved in Credit Risk Identification/Classification?

3. What parameters do they use in classifying/identifying the risk?

4. Please indicate the extent to which your bank rely on the following to identify credit risk. Applying and using the rating/measurement system in your bank on a scale of 1-5 where;

5 is = to a very large extent

4 is = to a great extent

3 is = medium extent

2 is = small extent

1 is = no extent at all

Number	Credit Risk Identification method	Effect				
		5	4	3	2	1
i.	Objective-based risk identification					
ii.	Scenario-based risk identification					
iii.	Taxonomy-based risk identification					
iv.	Common-risk checking					
v.	Risk charting					
vi.	Other (please specify)					

5. Please indicate the extent to which the following three categories of Credit Risks affect your bank. Applying and using the rating/measurement system in your bank on a scale of 1-5 where;

5 is = to a very large extent

4 is = to a great extent

3 is = medium extent

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Number	Credit Risk	Effect				
		5	4	3	2	1
i.	Settlement Risk					
ii.	Counterparty Risk					
iii.	Sovereign Risk					
iv.	Other (please specify)					

PART C

CREDIT RISK MANAGEMENT PRACTICES

1. Who in your bank is responsible for formulating the Credit Risk management practices?

- Board of Directors ()
- The Head Office ()
- The Risk Committee ()
- Branch Level ()
- Other (Specify); _____

2. Does your bank have a formally approved credit risk management policy?

- No ()
- Don't know ()
- Yes ()

3. Who approves the overall credit risk management policy in your bank?

- Non Executive directors ()
- Independent Directors ()
- Chair of the Board ()
- Chief Executive Officer ()

4. Who are the members of the Board Risk Committee?

5. How often do they meet?

- Monthly ()

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- Annually
- Other _____

6. Which of the following methods apply to your organization in relation to the validation processes employed in credit risk management

- External audit
- Risk management reviews
- Management certification
- Internal audit
- Regulatory compliance certification
- Control risk self assessment
- Consultant reviews

7. Indicate the level of your banks reliance on each of the applicable validation processes

Validation Method	High	Medium	Low
External audit			
Risk management reviews			
Management certification			
Internal audit			
Regulatory compliance certification			
Control risk self assessment			
Consultant reviews			
Independent Agency Rating			
Other (please specify)			

8. What Guidelines do they (refer to above) follow in formulating the practice?

- Central Bank of Kenya
- Basel ii Guidelines
- Parliamentary Guidelines
- Other (specify); _____

9. How do they measure the success of the policies adopted?

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which the following practices have been used by your bank in managing the credit risk below. Applying and using the rating/measurement system in your bank on a scale of 1-5 where;

5 is = to a very large extent

4 is = to a great extent

3 is = medium extent

2 is = small extent

1 is = no extent at all

Credit Risk:

No.	Specific action on Credit Risk	Effect				
		5	4	3	2	1
i.	Credit insurance and credit derivatives					
ii.	Covenants/Agreements					
iii.	Reduction on credit extended(tightening)					
iv.	Risk based pricing (charge higher interest)					
v.	Diversification					
vi.	Deposit Insurance					
vii.	Staff training					
viii.	Securitization					
ix.	Credit Referencing					
x.	Staff Rotation					
xi.	Competency based staff recruitment					
xii.	Use of Software based techniques					
xiii.	Other (please specify)					

11. To what extent does your bank rely on the following in gauging/monitoring the success of the above techniques. Using the scale of 1-5, where 1 means outstanding and to mean 5 very poor;

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	method	Extent of Reliance				
	CAMELS	5	4	3	2	1
i.	Capital					
ii.	Adequacy					
iii.	Asset Quality					
iv.	Management					
v.	Earnings					
vi.	Sensitivity					
vii.	Other (please specify)					

12. Please share any other issues that you may have in regard to Financial Risk Management practices by your bank

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MERCIAL BANKS IN KENYA

No.	Commercial Bank	No	Commercial Bank	No	Commercial Bank
1.	Chase Bank(K) Ltd	16.	Bank of Africa(K)	31	African Banking Corporation
2.	Equity Bank Ltd	17.	Barclays Bank(K)	32	Fidelity Commercial Bank
3.	Family Bank Ltd	18.	CFC Stanbic(K)	33	National Bank of Kenya
4.	Fina Bank Ltd	19	Gulf African Bank	34	Kenya Commercial Bank
5.	Prime Bank Ltd	20	Diamond Trust Bank	35	Jamii Bora Bank
6.	I & M Bank Ltd	21	Citibank N.A Kenya	36	Paramount Universal Bank
7.	Imperial Bank Ltd	22	First Community Bank	37	HFCK Bank
8.	Guardian Bank Ltd	23	Giro Commercial Bank	38	Equatorial commercial Bank
9.	Bank of India(K)	24	UBA Kenya Bank Ltd	39	Commercial Bank of Africa
10	Bank of Baroda(K)	25	Post Bank Kenya	40	Middle East Bank (K) Ltd
11	Ecobank Kenya Ltd	26	Habib Bank Ltd	41	Standard Chartered Bank(K)
12	Dubai Bank (K) Ltd	27	Trans-national Bank	42	Victoria Commercial Bank
13	K-Rep Bank Ltd	28	Co-operative Bank	43	Charterhouse Bank (Rcvshp)
14	NIC Bank Ltd	29	Development Bank(K)		
15	Oriental Bank	30	Consolidated Bank		

Source: Central Bank of Kenya, January 2010.