

**THE RELATIONSHIP BETWEEN CREDIT RISK MANAGEMENT
PRACTICES AND LOANS LOSSES - A STUDY ON COMMERCIAL
BANKS IN KENYA**

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DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than The University of Nairobi academic requirement.

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This research project has been presented for examination with my approval as the appointed supervisor.

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DEDICATION

This project is dedicated to my wife, son and daughter for their support, love and understanding without which this project's completion would not have been possible.

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I am indebted to many individuals for their support and contributions towards the successful completion of this project. My first and deep appreciation goes to my supervisor Mr. J.M. Ng'ang'a, for his professional support, guidance, commitment and encouragement. I would also like to acknowledge the management staff of the commercial banks in Kenya for their support during the study. I am also indebted to my family and friends for their material and moral support which enabled me complete my MBA course successfully.

LIST OF ABBREVIATIONS

APT	Arbitrage Pricing Theory
BCBS	Basel Committee on Banking Supervision
CAPM	Capital Asset Pricing Model
CCO	Chief Credit Officer
CDOs	Collateralized Debt Obligations
CRBs	Credit reference Bureaus
CIS	Credit Information Sharing
DSOs	Days Sales Outstanding
ERM	Enterprise Risk Management
IIF	Institute of International Finance
IRM	Integrated Risk Management
IT	Information Technology
NGOs	Non Governmental organizations
NPL	Non Performing Loans
NPV	Net Present Value
PVOs	Private Voluntary Organizations
SACCOs	Saving and Credit Cooperative Societies
SDF	Stochastic Discount Factor
SPSS	Statistical Package for Social Science

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ABSTRACT

This study investigated the relationship between credit risk management practices and loans losses - a study on commercial banks in Kenya. The objective of the study was to establish if there is a relationship between credit risk management practices and loans losses in commercial banks in Kenya. Descriptive research design was utilized in this study as it aimed to see if there is a relationship between credit risk management practices and loan portfolio losses in commercial banks in Kenya. It also tried to look at the most preferred practice in commercial banks and the effects on loans portfolio losses. The study utilized a standard questionnaire to collect primary data from the credit managers/officers through the drop and pick method from forty two (42) commercial banks in Kenya. However, only thirty six (36) of the respondent commercial banks completed the questionnaire. The data was then analyzed and the findings presented using tables giving descriptive statistics including frequencies, mean and percentages. Research findings indicated that a significant number of commercial banks in Kenya had not put in place credit risk management information systems to effectively measure, monitor, control and identify risk, and that majority of management of commercial banks in Kenya recognized the need for information sharing among players within the industry in order to mitigate the risk. It was concluded that credit risk management practices are common among most of the commercial banks in Kenya and that management of these commercial banks appreciated government legislation relating to credit risk management through the introduction of the credit sharing information Act, and that there is a significant negative relationship between credit risk management practices and loans losses in commercial banks in Kenya. In line with the findings and conclusions of the study it was recommended that sound credit risk management practices are adopted and implemented especially through credit risks management information systems, and that the board of directors of commercial banks in Kenya and Kenya Bankers Association should consider provisions for specific credit risk management practices to be adopted and implemented uniformly by commercial banks in Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Background

Credit risk management has become a major concern in many financial institutions and markets. This is not only a concern for Kenyan institutions but also a global problem. The continuous changing business environment, stiff competition and ever growing financial instruments has put every player on toes. Due to these challenges, many organizations have shifted from the traditional models of having a specific department or persons manage credit risk and adopted various practices. Just like it is important for every staff to be equipped with customer care skills, credit risk management have been taking the same approach to ensure that everyone in the organizations is equipped with tools and skills of detecting risk the earliest however small it could be. The default of small number of borrowers may result to large losses for a financial institution (Bessis 2003) which can lead to massive financial collapsing affecting the whole economy.

The past studies in this field have looked at general effects, techniques, role of internal auditors, and relationships between risk management and profitability in institutions. The profitability is basically looked at the overall operations without looking at specific causes. This leads to a very important question, is it the basic operations leading to losses for example, salaries paid, poor marketing or are we getting this losses from loans. Loans being the main source of commercial banks income, there is dire need to find the most critical practices which can be given to core staff to minimize losses arising from loans. In the past, many transactions were done on cash basis hence there was no major need to

emphasise on wide risk management knowledge to everyone in an institution. A few staff or department could manage the portfolio without incurring extra costs. Due to the high level of competition, the scenario has greatly changed and seen the credit portfolio grow to enormous levels calling an all round management styles.

Granting credit has been used a marketing tool hence inevitable in daily basis. How the credit will be granted and converted into cash needs a lot of wisdom otherwise there are many costs which may arise due to poor management. Some of the cost include, hiring of risk specialists, recovery resources, equipment, financing credit portfolio interest rates and as well write offs due to bad loans. Credit having put the share holder investment at stake, risk management ought to take a centre stage to ensure the value of the shareholder don't go to drain. For a clear flow the main terminologies are defined in this chapter so as to look at the deeper meaning in financial markets and institutions. Since credit risk is the potential change in net asset value due to change in perceived ability of counterparties to meet their contractual obligation. When a borrower fails to pay back or meet the principal and interest obligations, it becomes clear that credit risk arises much earlier than the final failure to pay becomes visible. Most financial institutions as early as one month late payment, a loanee was considered as a defaulter and thus efforts of collection were intensified explaining why the default rate has fallen.

Investors attempt to reduce risk through diversification and /or hedging Fulton (1999) which reduces both systematic and non systematic risk. Systematic risk being that which affects the whole market, it calls for strategic measures which needs continuous monitoring and evaluation to suit the prevailing conditions. Non systematic are those

affect specific institution and don't necessarily affect the market in the short run. These non systematic risks as well need to be controlled as they may lead to detrimental repercussions to the institutions or the market if not well controlled. For example, employee immoralities in one bank may send signals to other banks' affecting the whole market.

In today's environment of intense competitive pressure, volatile economic environment, rising default rates and increasing levels of consumer and corporate loan instruments, an organizations ability to effectively monitor and control its credit risk could imply the difference between success and survival (Altman 2002) In the past, banks which were large and performing took a dramatic turn and started reporting large losses due to credit exposure that turned sour, interest rate positions taken, or derivatives exposures that may or may not have been assumed to hedge financial position statement risk (santomero, 1997) In this response commercial banks have almost embarked on upgrading their risk management and control systems. Prudent credit risk assessment and creation of adequate provisions for doubtful debts can cushion the risk. However, when the level of non performing loans (NPLs) keeps on growing, the provisions are not sufficient enough protection (Gupta, 1998). This makes it a clear indication that holistic credit risk management is inevitable in commercial banks.

1.1.2 Credit

Credit can be defined as the concept of differed payment in return of immediate goods or services delivery or consumption. The very word is derived from the Latin credere, which means the trust between the seller and the buyer. In the past Burt Edward (1990) modern

definition of credit and description of the art of credit management invariably make use of the terminology of the business school and the accountant. 'Cash flow', 'marketing tool', 'liquidity', risk exposure' – all such terms are used to illustrate a basic truth which hold good in every period of human history: those with surplus assets- be they cash or goods – will use those assets to stimulate trade.

Without this trust the development of the modern industrial community would have been impossible. Mass production and the consequent reduction of unit cost are only viable in an economy which allows continuous buying activity. After the end of the Second World War, supply of personal finances started to trickle in the market. Not until 1950s was accepted that personal loans could be made against the security of a steady income. The last few decades have seen the floodgates of consumer credit flung wide open leading to alterations of techniques to meet the changing environment in the financial markets and institutions.

1.1.3 Credit Risk

Credit risk can be defined as potential, uncertainty and exposure that the borrower or counter party may fail in part or fully in meeting the payment obligation with or without a covenant. On the flip side and according to Frank knight (1921) risk is a probability of occurrence which may be subjective or objective. The objective interpretation, probabilities are real where as subjective probabilities are human believes. This is a clear indication that credit risk can be discovered through statistical analysis or through logic. So far, this definitions of risk is shedding some light that there are two streams of risk flowing all through to 21st century.

Harry Markowitz (1952) paper has gone further to relate risk as a variance of the expected return or yield. Through use of statistical analysis, one can easily identify the efficient frontier for a portfolio in which credit portfolio is not exceptional. In this essence, there is a great call for risk management. Risk management therefore is described in the financial literature as being concerned with identifying and managing a firm's exposure to financial risk. Financial risk being the variability in cash flows and market values caused by unpredictable changes in the commodity prices, interest rates and exchange rates Kaen, (2005), and due concern should be taken to ensure sufficient cash flow to enable profitable performance in the financial markets and institutions.

1.1.4 Commercial Banks and Financial Institutions

Commercial banks are those institutions that are licenced by central bank to take deposits and advance credit. They form the back bone of the financial markets. Commercial banks play a key role as they determine the rate and various ways of allocating resources to the economy. Transactions in financial markets give rise to financial assets and financial liabilities. The main types of financial markets are capital markets and money markets. Money markets are financial claims and obligations traded in the market and have maturities of less than a year unlike the capital markets in which the financial claims have maturities of more than one year.

Financial institutions are specialized firms whose activities include the creation financial assets and financial liabilities. With financial intermediary, savings are transferred to economic units that have opportunity for profile investment. Real resources are therefore allocated more effectively and real output for the economy as a whole is increased.

Financial intermediaries' institutions like commercial banks, insurance companies, society savings and loan investment institution, mutual funds, credit unions, finance companies and money market funds take a great role as far as allocating surplus assets and money markets are concerned.

1.1.5 Types of Credit Risk in Commercial Banks

Credit Risks can be classified into various categories which include credit default risk, operational risks, concentration risk, and country risk. Credit default risk is when a financial institution considers that the loanee is unlikely to meet the credit obligations or has over 90 days past due on any material credit. Concentration risk is associated with any single exposure or group of exposures with the potential to produce large enough losses to threaten the banks core operations. This may arise in form of single name concentration or industry concentration. On the other hand, country risk is a scenario where the risk of loss arises when a sovereign state freezes foreign currency payment or when it defaults on its obligation, also called sovereign risk. Operation risk arises from the internal mechanism of the institution during which may range from management staff to the internal systems. Default and operational risks have proved to be challenges in the financial markets and institutions hence a major concern. Availability of consumer information, certification in credit risk management staff and technology has been the main contributor in the two categories of risk hence posing a great threat to the market.

1.1.6 Credit Risk Management in Kenya Commercial Banks

Kenya being a free economy country, credit risk management has been left to the hands of public financial institutions, private bodies and statutory organizations like Kenya

Central bank or the ministry of finance. Private organizations being profit driven institutions, they are characterized by various moral hazards ranging from institutional to individual levels. This has seen deprivation of the surplus which otherwise could have gone to deposit accounts drop to a point which becomes difficult to extend credit to potential and viable investors. Interest rates payable on deposits hence have gone down as the rates on loans soar up to a point which an ordinary investor can't afford. This has greatly led to a very high default risk in the market hence unbearable inefficiency in the market.

The goals of intervention by statutory bodies and subsidies like credit to youth or special programs for the most part did not work. A chief failing was that lending institutions set up to providing capital to small investors and small entrepreneurs could not survive without the concessional aid provided by donors. (Such institutions included government-sponsored bodies as well as nongovernmental organizations (NGOs) and private voluntary organizations (PVOs) In part this inviability came about largely because interest subsidies for money borrowed pushed down the rates for money deposited. This has discouraged potential savers, drying up the flow of funds for credit purposes. Moreover, the default numbers ran high, owing to lax screening of borrowers. But while the institutions were struggling, private moneylenders continued to charge high rates—and to thrive. More fundamentally, though, subsidized credit often missed its target—the rural poor and small entrepreneurs. It is costly and risky to make small loans to large numbers of poor borrowers. As a result, lending institutions tended to extend credit to large and less risky borrowers. Protecting their solvency in this way caused the institutions generally to redistribute income regressively.

1.2 Statement of the Problem

Loan portfolio, if not well managed can lead to detrimental effects to any organization. In the past many transactions were done on cash basis and a single individual or department could manage the credit portfolio. Many organizations have been forced to hire external bodies or specialized persons to manage the credit risk faced by organizations whereas this credit risk management practice can be established within the organization. Kibara (2007), Murithi (2009) carried out studies showing the role of having internal auditors to manage credit risk. This is an additional cost to the organization and may eat up the available profits. The various risks which are faced by commercial banks need to be identified, analyzed and minimized at the earliest possible. This identification becomes only possible when cultures of practices are adopted. As competition grows, many commercial banks have innovated various financial products such as unsecured loans, plastic money (credit cards) hence calling for more effective techniques of risk management. Kimeu (2008) carried a survey on risk management techniques and highlighted training as critical to be able to minimize the level of NPLs of unsecured loans.

To be able to achieve the desired profits, there is a very urgent call for institutions to train all their staff on risk management skills and techniques especially on loans. In the past, risk was a concern for few or specific departments but as the loan portfolio kept on growing, hiring of specialized professionals was inevitable leading to very high cost of doing business. If it were not for profits and room for continuous growth, no commercial bank would be operating in Kenya or anywhere in the world. In the past twenty and so years, the banking institutions have faced several challenges which include among others

unfavorable political environment, non performing loans, foreign currency fluctuations, ever changing interest rates and unfavorable regulations, which have threatened the stability as stated by Roche (2003). Bessis (2009) risk management is one of the key aspects of corporate governance, particularly in the case of banks. The main risks faced by commercial banks are Market risk, interest rate risk, credit or default risk, operational risk and liquidity risk which every commercial bank is bound to face. Default risk has become the greatest of all and has eaten up available gains hence raising eye brows on how we give our loans.

Studies done so far, have not established any relationship between credit risk management practices and the losses arising from loans in Kenya commercial banks. Ngare (2008) conducted a survey on credit risk management practices by commercial banks in Kenya. Momanyi (2009) looked at the effectiveness of risk based supervision as adopted by the central bank of Kenya. Ndungu (2003) studied determinants of profitability of quoted commercial banks in Kenya. Ngare (2007) credit risk management practices by commercial banks in Kenya. All this didn't look at the losses associated with these loans. Other than risk management, it's prudent an extra step can be made to increase identify the losses from loans and get the best practices to minimize the losses.

It is evident that it is not only Kenyan banks which are affected by credit risk, but also the international studies embark on risk management as key for banks survival. Arrow Debreu (1954) Information asymmetry generates imperfections of market deviation from the theory of perfect market. Diamond and Dybvig (1983) consider banks and non banking intermediaries as being a coalition of depositors that ensure those who save up

against the risk that could affect their state of liquidity. Leland and Pyle (1977) define financial intermediaries as a coalition that deals with information distribution. Kenya commercial banks are characterized by poor credit policies, information asymmetry which has led to poor credit risk management to push the interest rates down. More so unlike the developed economies, credit discipline and certification has not been embraced in many institutions.

All these studies provide critical leads on credit risk management though they have not clearly shown the direct relationship between credit risk management and losses arising from loans. An institution may and in the name of risk management practice and use high cost models or complicated procedures which beats the purpose of business. Since a bank could be making losses or profits from other operational activities, there is need to find what the loans portfolio is contributing. The gaps in these empirical studies led to this research question “what is the relationship between credit risk management practices and loan losses in Kenya commercial banks” i.e. was it sensible to involve every member of staff and motivate them to identify and share potential risks or we adopt the traditional risk management styles. The study thus hypothesized that commercial banks should cut cost in credit portfolio management through involving all members of staff and stakeholders in credit management hence holistic approach.

1.3 Research Objectives

To establish if there is a relationship between credit risk management practices and loans losses in commercial banks in Kenya.

1.4 Significance of the Study

Banking Industry

From the study, the banking industry is able to identify specific and the most effective practices to minimize loan portfolio losses other than blanket practices in risk management. This poses a more specialized risk management making it easier to detect risk the earliest.

New and Potential Investors

The new and potential investors can use this study in planning staffing needs to their new investments in the industry. Unlike those who have entered the industry through try and error, the potential and new investors can emphasize on specific staff skills noted as crucial in minimizing loans losses.

Researchers and Academicians

As the business environment keep on changing, prospective researchers may use this study to explore more dimensions of challenges to risk management in the broad spectrum financial institutions. Academicians may use this study to identify the specific practices to compact specific risks as different risks require different approaches.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter looks on the credit risk management practices based on the information from past researchers on the topic as well as documented and published theories by scholars on credit risk management. There are various theories in risk management which include Portfolio Theory, Capital Asset Pricing Model (CAPM), and Arbitrage Pricing Theory (APT). These theories have their strengths and weaknesses and a balance ought to be stricken to ensure risk exposure is as minimal as possible in commercial banks. Due to the assumptions in the theories, practical measures in risk management ought to be developed as not all commercial banks or financial markets operate at the same environment. Depending on the business climate, reasonable credit risk management practice need to be adopted to mitigate risk. The various studies on risk management have viewed the practical approaches and most of them are human based. Some of this is credit approval procedures, investment in the right human expertise and experience.

2.2 Theoretical Review of Credit Risk Management

2.2.1 Portfolio Theory

In investment, portfolio theory management is a critical theory. It tries to look for the most efficient combinations of assets to maximize portfolio expected returns for given level of risk. Alternatively, minimize risk for a given level of expected return. Portfolio theory is presented in a mathematical formulation and clearly gives the idea of diversifying the assets investment combination with a purpose of selecting those assets

that will collectively lower the risk than any single asset. In the theory, it clearly identifies this combination is made possible when the individual assets return and movement is opposite direction. An investor therefore needs to study the value movement of the intended asset investment and find out which assets have an opposite movement. For example, optimum allocation of available resources in stock and bonds provides a better investment other than investing all the whole resources in one asset. When the stock value increases as the bond fall, an investor's investment is cushioned from massive loss hence a stability in the investment compared to individual asset investment. However, risk diversification lowers the level of risk even if the assets' returns are not negatively or positively correlated.

Risk is defined as the standard deviation of return, i.e., to what extent is the actual return deviating from the expected return. Therefore, portfolio being a combination of assets, the model becomes a weighted combination of these assets' returns. When different assets are combined and whose returns are not perfectly positively correlated, then portfolio theory leads to reduction of the total variance of such asset combination returns over a given period of investment. The return is calculated by getting the change in value of the assets plus any distribution received during a given period over which the assets are held and expressed as a fraction of the initial outlay. From this theory, it is evident that the level of risk in a portfolio depends on risk of each asset, proportion of resources allocated on each asset and the interrelationship between the assets making up the portfolio. The major assumptions in portfolio theory in managing risk are that the investors are rational and the market is efficient and perfect.

2.2.2 The CAPM Theory

The development of CAPM has been a milestone in financial decision making especially in assets pricing and makes it more possible in quantification and pricing. The CAPM model is an equilibrium pricing model, which views the equilibrium rates of return on all risky assets as a function of their covariance with the market portfolio. It explains how the required rate of return of an asset depends on the risk that cannot be eliminated through diversification. Extended by Harry Markowitz's portfolio theory, the notions of systematic and specific risks are decomposed. Systematic risk is the risk of holding the market portfolio. When the market moves, the individual asset is more or less affected to the extent that any asset participates in the general market moves, that asset entails systematic risk. On the other hand, specific is that risk which is unique to an individual asset. It represents that component of an asset's return which is uncorrelated with the general market movement.

The specific risk is that risk to an asset which may arise due to the internal factors such as change of operating systems, strategy taken, and change of management or business reengineering process. These specific changes within the organization may lead to positive or negative impacts which may lower or increase the overall risk in the institution. The unsystematic risks can therefore be diversified and it will always depend on the institution's approach. Different organizations have different specific risks depending on how they approach them i.e., the asset, ideas, policies, personnel, etc., whose total output may differ.

Un-diversifiable or systematic risk is that which cannot be eliminated through diversification. They are mostly the variation of assets values due to unpredictable macro factor movements in the financial environment caused. Systematic risks are a must adopt by investors as they are necessary. It doesn't matter whether or not an institution has employed the best human resource, the most efficient system or not, hence factoring them in decision making becomes of essence. For example, an institutions' performance is influenced by economic trends. In CAPM, the risk associated with an asset is measured in relationship to the risk of the market as a whole.

In view of this case, with assumptions that investors are homogenous and risk averse, they have to be motivated to invest, they need a rate of return that will compensate them for taking on the risk at the end of period of holding given asset(s). Since it is impossible to eliminate risk in totality, CAPM helps investors to calculate the possibilities of various expected returns on investments and make more informed decisions. This model has major assumptions, that there exists a risk free asset such that investors may save or lend unlimited amounts at the risk free rate, efficient market with fixed quantities, perfectly divisible assets, no transaction cost and taxes.

2.2.3 Arbitrage Pricing Theory (APT)

The need to develop a model with fewer assumptions unlike CAPM arose and this is how (Arbitrage Pricing Model) APT became. The major assumptions in APT are that the capital markets are perfectly competitive, preference of more wealth to less wealth with certainty by investors and the stochastic process generating asset returns can be expressed as a linear function of a set of the number of factors or indexes. APT brought a clear

presentation on how to estimate risk. It uses the risky asset's expected return and the risk premium of a number of macroeconomic factors. The basis of APT is the idea that the price of a security is driven by a number of factors which can be classified into two categories: macro and company specific factors. The linear relationship is therefore necessary condition for equilibrium in a market where market players maximize certain types of utility. A linear relation between the expected returns and the betas is critical in identification of the stochastic discount factor (SDF). Like the CAPM, APT asserts a linear relation between assets' expected returns and their covariance with other random variables. Apt relates the price of security to the fundamental factors driving it and do not rely on measuring the performance of the market.

2.3 Empirical Review of Credit Risk Management

Credit risk management is a common vocabulary among the financial institutions, regulators and whole financial market players. Commercial banks are not in any way exception as they play a major role. Many studies both locally and internationally have been done on how credit risk can be managed. Credit risk management is not only a concern to commercial banks but also a concern to any institution granting credit. Viiru (2008) looked at credit management practices at Kenya power and lighting company ltd which is not commercial bank. Commercial banks are most affected by credit risk due to liquidity exposures. Maina (2003) conducted a survey on risk based capital standards and the riskiness of bank portfolio in Kenya, this is a clear indication there must be a cost on credit portfolio management and if not well controlled at inception, then a crisis must be anticipated. Training staff and getting the certified in the credit risk management could be healthy in management of credit portfolio, Muchiti (2009).

Ndungu (2003) studied determinants of profitability of quoted commercial banks in Kenya. Mudiri (2003) sought to determine credit management techniques applied by commercial banks in Kenya whereas Mboe (2004) studied on the relationship between credit risk analysis and the level of nonperforming loans (NPLs). According to Chege (2010) effective risk management requires a reporting and review structure to ensure that risks are effectively identified and assessed and that appropriate controls and responses are in place. Risk monitoring can be used to make sure that risk management practices are in line and proper risk monitoring also help the management to discover mistakes at early stage per Al-Tamimi and Al-Mazrooi, (2007).

Drzik,(1995) hold that credit report is not the result of any analytical exercise to evaluate the potential downside loss but rather subjective evaluation of management tolerance based upon rather a imprecise relocation of previous down turns. As well there has been emergence of portfolio managers who watch the loan portfolios degree of concentration and exposure to both specific and non specific risks. Many organizations also will report concentration by individual counterparty. To be meaningful, however, this exposure must take into consideration of all related affiliates. Risk monitoring is part of corporate governance item and shareholders have their rights to know if credit risk procedures have been followed to the latter. Parrenas (2005), the share holders of a company can use their rights to demand information in order to judge the efficiency of the risk management systems put in place which is always clearly stated in the directors' report.

Khan and Ahmad (2001) conducted a survey of risk management practices and found that on average the lowest percentage is on the measuring, mitigating and monitoring risk that is 0.69 score as compared to risk management policies and procedures that is 0.8 and internal control of organization being 0.7. Barton et al, (2002) held that levels of data accumulation are never easy, particularly across time zones. Debt portfolio which constitutes a large proportion of assets in most financial institutions is relatively illiquid and exhibits a threat to operational efficiency according to a study by Koch and Macdonald, (2000). Mwisho (2001) on lending conditions and procedures indicated that credit risk management starts with good selection of products, and this can only be attained only if all staff in an organization is aware of the risk in developing these financial products. These measures however, focus on risk and return trade off. That is, measuring the risk inherent in each activity or product and charge it accordingly for capital required to support it. This however, does not resolve the issue of recovering loanable amounts. Repayments pose a thorn in flesh due to the information asymmetry on the borrowers.

Greuning and Bratanovic, (2003) pointed that effective credit risk management involves establishing an appropriate credit environment, operating under a sound credit granting process maintaining an appropriate credit administration that involves monitoring process as well as adequate controls over credit . It requires top management to ensure that there are proper and clear guidelines in managing credit which everybody in the credit administration understands well. The assessment of borrowers can be performed through the use of quantitative and qualitative techniques. The major challenge in using the

qualitative approach is that it is more judgmental and there may be no concrete evidence on the decision taken. According to Heffernan, (1996) some numbers with pre-determined values can be awarded and the overall sum gotten to measure the risk. This is basically called credit scoring. The model is less costly and significantly reduces bias and potential risk. According to Kwan and Eisenbeis, (2005) on the other hand, quantitative models make it possible as it adopts numerical measures to establish the important factors that explain the default risk, evaluation of degree of this factors and also determination of default risk pricing.

Quantitative models have proved very critical in approving new and existing credit. Edmister and Hatfield, (1995) pointed out that monitoring of borrowers is very important as current and potential exposures change with time and the movement underlying variables and also very important in dealing with moral hazards. Frequent contact with borrowers and creating a conducive environment where the banks will be seen the solution to customers' needs, creating a culture of support to the borrower may lead to symbiotic relationship and making the borrower feel like a partner in the bank hence reducing the risks of default. Continuous updating of customer files, periodic visits and regular reviewing of borrowers' reports are necessary in credit risk management Donaldson (1994).

To reduce exposures, tools like collaterals, covenants, credit limits, securities, guarantees can be employed per Berger (1994). It has also been observed that high quality staff is critical to ensure depth knowledge based judgments making during and after granting

credit. Unlike in the past, where credit operations were manual, computer systems have been perceived to be very useful in improving on operation efficiencies, credit analysis, monitoring and controls as they keep track on trends of credit within the portfolio. Mwirigi (2006) did an assessment of credit risk management techniques and found that credit policy was an appraisal tool, a study which had a consistent outcome with Muriuki, (2007), which as well pointed out that Kenyan oil companies use manuals to train employees on credit risk management. He also argued that, risk management is all about people, how they think, and how they interact with one another which are core in enhancing operational efficiency. He also pointed out that technology is useless if it's in the wrong hands stressing on the need of certified credit staff.

The main purpose of the credit risk management is to reduce or diminish the exposure posed by the non-performing loans (NPL) especially from the obligors, management, public or the investors. There is need for sound procedures, systems and processes of the financial institutions, intermediaries and their affiliates in creation of desirable levels that lead to a great impact in the flow of the financial resources. However, various economic uncertainties, international markets, or financial constraints can cause the financial status to be unstable. Aside from the financial deficiencies, the other causes of the financial constraints are the lack of confidence among the financial market to provide external help for the needed consumers, lack of capability to gather the information of the consumers, and the lack of push to have an aggressive debt collecting. The non-performing loans can definitely cause too much stagnation of the financial sources.

Empirical studies presented the limitations of risk management practices before and during the current financial crisis. Rene Stulz (2008) argued that there are five ways in which financial risk management systems can break down, all exemplified in the current crisis and other recent ones. This include;- Failure to use appropriate risk metrics, Erotic measuring of known risks, failure to take known risks into account, communicating risks to top management, and poor monitoring and managing risks. Empirical evidence suggests also the limitations of the risk management practices during the current financial crisis. A study conducted in 2008 among 125 top finance executives representing a solid cross section of American industry showed that approximately 72% of respondents expressed concern about their own companies' risk management practices and ability to meet strategic plans. Similar, a survey carried out in 2008 by the Economist 500 senior management involved in risk management from leading banks around the world identified the weaknesses in risk management that contributed to the current financial crisis.

From both the theories and the past studies, it is evident that to reduce loan portfolio cost, risk management should not be a responsibility for few selected persons or departments but everyone in the commercial bank organization. It is therefore easier for the banks and other financial institutions to assess the ability and credibility of the loaners. In terms of an enterprise, the assessment of their credit portfolio is enough to provide a system that continuously promotes their viewing of the risks and the capability of the business enterprise to pay. It is very common that the banking process limits the occurrence of the risks during every transaction; hence, the bank managers should also rely on the effectiveness of the imposed regulations to anticipate the future risks. From the different

financial indicators, the position of the institution on the market failure still depends on the internal process and the actions of the people. The economic theory in banking encompasses the interest and income theory in which is the basis of the cash flow approach in bank lending Akperan, (2005).

The importance of the credit risk management is recognized by banks for it can establish the standards of process, segregation of duties and responsibilities such in policies and procedures endorsed by the banks Focus Group, (2007). Credit risks appear in financial institution because of the uncertainties attached to the financial system. Still, the major approaches applied by the institutions are the continuing efforts on research and close monitoring. Banks believe that the research and monitoring are the key sources of uncertainties like data generating institutions and the treasury, Uchendu, (2009). As can be seen from the definition, the generic risk management framework includes four major risk management components: risk identification, risk measurement, risk mitigation, and risk monitoring and reporting. In a holistic view, banking risks are categorized into three types, namely pure risk (hazard risks), financial risks and non-financial risks. Some of the major financial risks are market risk, credit risk, liquidity risk, interest rate risk, foreign exchange risks, solvency and capital adequacy risk. As for non-financial risks-the major one is operational risk. Apart from these common types, Islamic banks are also exposed to risks caused by the various modes of financing available to Islamic banks and their unique nature. Some of these risks are benchmark risk (rate of return risk), withdrawal risk, fiduciary risk, reputation risk, displaced commercial risk, *Shari'ah* compliance risk and asset price risk.

To enable sound credit risk management, it becomes prudent for the commercial banks to identify the risk with the objective of understanding types and sources, the risk measurement process covers. The appropriate risk indicators to measure the size of risk and its impact in the financial institutions and its business activities must be identified, evaluated and sound decision made. At present, there are different measurements for different kinds of risk. James (1996) argued that many innovations in the methods and systems of measuring risk are motivated by the ability of the institution bank to allocate capital among their expanding array of non-traditional, fee-based activities which do not involve any use of capital for funding purposes, but create a contingent liability for the bank.

2.4 Main Practices in Credit Risk Management

For stable and continuity in commercial banks, sound holistic credit risk management practices are inevitable. Adoption of this sound practices will lead to enhancement value of the firm and increased shareholder wealth. The value enhancement arises from minimization of running cost, taxes, less financial distresses as the firms cash flow is regulated hence positive Net present value (NPV). From the agency theory, many managers engage in credit risk management without aligning the interest of the shareholders. This happens especially when the management is pursuing personal interest without considering the effects of changes in interest rates, foreign currency risk, commodity prices etc.

Fatemi and Glaum, (2000) outline the steps that should be taken without regards for the persecution of these decisions for the shareholders' value. Of late, there has been a rapid

growth in types of counterparties ranging from sovereign governments to individuals and the expanding varieties in the form of obligations like complex derivatives, unsecured loans, auto loans etc that means credit risk management has jumped from the fore front of risk management activities carried out by firms in financial services industry Smithson, (1998). Risk management is nowadays considered as a key activity for all companies. Many of the disastrous losses of the 1990s, such those at Orange County (US) in 1994 and Barings bank in 1995, would have been avoided if good risk management practices have been in place (Hull, 2007). There are crucial credit risk management tools which can be applied in credit risk management to minimize loans portfolio losses as discussed in the following parts.

2.4.1 Early Identification of Risk

Unless the financial institutions are able to identify the risk they face, it could be next to impossible to survive. This makes risk identification very vital for effective and efficient risk management. To identify the possible risk, formation and implementation of risk management function is required. The function should have a clear and well structured credit policy with the full certified personnel in credit risk management skills, Butt Edward (1990). The function is assigned with the task of identifying the risk. Some of the risks associated with financial institutions include: default risk, interest rate risk, operational risks or foreign exchange risks which must be in the credit function domain by Christen and Pearce, (2005)

2.4.2 Approaches to Risk Identification

There are two approaches of the risk management process: the traditional one and the enterprise risk management (ERM). The traditional approach, a segmented and compartmentalized one, consists in the following: different risks are delegated to different specialized persons who use different instruments to tackle these risks. For example, the property and liability risks are the responsibility of the risk manager. At the same time, the treasurer is responsible to manage financial risks (such as exchange rate, interest rate, and credit risk) using different types of derivatives contracts (options, forwards, futures, and swaps). The second approach, called Integrated Risk Management (IRM) all the risks are assembled in a strategic and coordinated framework. Enterprise risk management requires an entity to take a portfolio view of the risk. Corporate Risk Management is subsequently motivated by market imperfections, such as asymmetric information, transactions costs, non neutral taxes and limited access to external financing. Even though major and complex risk identification is a function of credit function, credit risk management should spill all the way from top Management to the bottom operational management to be able to identify the potential risks.

2.4.3 Policy and Procedures in Credit Management

One of the best tools in credit risk management tools is the credit policy. This may be documented or implied and any firm, financial or non financial should ensure one is in operation. The decision whether to extend the trade credit terms, is a compromise between limiting the risk of allowing for the payment postponement from unreliable purchasers and gaining new customers by way of a more liberal enterprise trade credit

policy. This decision shapes the level and quality of accounts receivables. Robichek, (1965) discuss risk management as a forward looking process, which involves decision making on an ongoing basis. The Basel committee on banking supervision (2001) defines financial risk management as a sequence of four processes: the identification of events into one or more broad categories of market, credit, operational and other risks (and then into specific sub-categories); the assessment of risks using data and a risk model; the monitoring and reporting of the risk assessments on a timely basis; and the control of these risks by senior management. To be able to manage credit Risk, it therefore implies a clear definition and responsibilities are stated on who should or not approve credit.

2.4.4 Credit Scoring and Rating

Credit scoring and rating involves advance measuring and analyzing the risk involved advancing loan to a borrower. Credit customers are ranked with a score card where high and low scoring implies low and high risk respectively. This depends on the weight given and a thresh hold on which customer should not get credit. The reliability of the credit scoring and calibration can be verified by analyzing ex-post observed credit loses per score, as highlighted Bessis, (2003).

Specific standards are analyzed depending on both macro and specific factors in the financial institutions and markets which are used to gauge the potential risks. However, due to ever expanding financial instruments, the environment has become more complex. The implications of current financial crisis on the international financial markets are multiple. We know that the final lessons of the crisis can't be drawn now because we need more information and analysis. The current financial crisis has brought home a

number of half lessons from the risk management point of view. One is that financial innovations can hold unknown risks. For example, the use of credit derivatives for hedging or speculative purpose implies numerous risks, such as: credit risk, counterparty risk, model risk, rating agency risk, and settlement risk Gibson, (2007).

In the recent periods, credit scoring has evolved and unlike in the past where decisions were pure judgmental, technology has taken place hence better and more efficient decision assisting tools. Some of the major items looked at customers' character, capital, collateral and the condition of the customer leading to 5Cs rule. Each C is given a value of risk depending on the weight assigned to it. Character is behavioral and will look at the integrity, honest. Collateral will see the security given and will weigh the difference between the debt and asset value as condition will look at the circumstances which the debt is advanced. Is it a genuine case and worth the debt, how is the market pressure, is it wise to advance the debt, what are the prevailing regulations in the market, the competitive pressure etc will determine the condition. On aggregating the overall scores, an indication how advancing credit may be risky will be easily analyzed hence more sound conclusion Servegny and Renault, (2004)

2.4.5 Assessment and Analysis of Credit Risk

Different financial institutions face different types of risks. It is therefore important to assess the possible risk a certain institution may face hence group this risk according to their nature or the magnitude of exposure. Further, sub grouping the specific risks in the non systematic risk will put the firm in an even better chance of not being exposed.

Proactive strategies are put in place in the case of systematic risk. For example, an insurance guarantee, cover and extra data storage may be put in place and retrievable in the likely hood of fire. The Central depository Systems has applied this and has kept the investors and consumers on the save side in the markets.

2.4.6 Human Expertise System

Even if a firm invests in the most expensive, efficient and effective technology systems, human based systems becomes a critical element in .Credit risk management is mitigated through use of this experts. A trained and certified professional must be entailed to credit control matters like appraising credit applications, monitoring, evaluations and possibly advising on the direction to take. The classic credit analysis is highly labor and information intensive process consisting of steps depicted in the Caoutte and Narayanan, (1998) that showed the classic credit hinges on the subjective judgment of trained personnel. As the financial markets keeps on changing, the past training may become obsolete with time making this training a continuous circle so as to update the credit experts on emerging possible exposures.

Morris, (2001) indicated that aiding of analysis; the credit officers usually employ a set of standard and specialized industry specific ratios to compare the potential borrower benchmark. The commonly expertise used ratios are current ratios, liquidity ratios, receivables, and days sales outstanding (DSOs) and portfolio aging analysis ratios. On developing expertise in analyzing credit worthiness in the financial sector, there occurs a notable growth and especially during booms, Schreiner, (2003). To ensure that the

business liquid test and at the same time ensure loyalty is maintained, the credit experts categorize the business in 80/20 rule hence employing extra efforts on the 20% who give 80% of business, Burt Edward (1990).

2.4.7 Credit Approval Process

Credit approval is the most crucial point as far as credit risk management is concerned. At this point where credit is granted or declined. Credit should only be approved only when all necessary procedures have been followed to the latter. This involves sound decision making and should be centrally controlled. Decentralization may be necessary where a firm is large. However, the approval should be by a well trained officer who can bear responsibilities in case of making wrong decision. A clear and established process of approving new applications and existing has been seen of great importance. This could be done by Chief Credit officer (CCO), accredited credit committee or board committee.

As it has been the history, there has been a long time bad relationship between the accountant and the sales persons, the (CCO) should sit any credit approval committee. Otherwise if this decision is left to the accountant, no credit will ever be advanced as he/she will always think of the write off. Naturally, accountants are risk averse and rarely take risk. On the other side, sales persons will always think of that new sale irrespective of the risk exposure. Prudent credit practices require that persons empowered with credit approval authority should not have customer relationship responsibility. Approval authority of individuals should be commensurate to their positions within management ranks as well as their expertise, Mwisho (2001).

2.4.8 Continuous Risk Monitoring

After taking all due steps in risk controlling up to the point of approving credit, it doesn't mean that no more risk may arise. Risk monitoring must continue in the existing and new credit. Effective reporting, evaluation on performances must be done in specified periods. This could be weekly, monthly or quarterly depending on the organization. In the reports risks are identified, assessed and appropriate controls are taken. Through continuous monitoring, identification of weaknesses and strengths becomes easier. Al-Tamini and Al-Mazrooei, (2007), control has to be established at different levels.

2.4.9 Mitigating Risk

Ernest and Young (2008) on behalf of Institute of International Finance (IIF) surveyed 62 of the largest banks to assess banks' progress in implementation of risk governance. From these studies, it was found that for risk mitigation to be effective, it was a must to be legally enforceable. Some of the noted risk mitigation instruments were collaterals, insurance, regulatory capital, guarantees and derivatives. In the event that counterparty is unable to meet part or the whole obligation, the claim is offset using the security hence eliminating or reducing the exposure.

2.5 Conclusion

In respect to the theories and the empirical evidence, there is need to adopt the best Credit risk management practices that minimize the losses arising from loans. This needs to be active process that enables the banks to proactively manage the loan portfolios, minimize provisions, lost interest income and minimal write-offs. Financial institutions shall enhance growth through adoption of better credit risk management practices which involve methods, procedures, processes and rules used in minimizing loan losses facing institutions in their lending endeavors.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research method that was followed in completing the study. It is the guiding procedure on how and what data was collected, measured and analysed. The chapter is structured into; research design, target population, data collection instruments, data collection procedures and finally data analysis.

3.2 Research Design

Research design is a plan to generate answers to research problem. This study used a descriptive research design as it aimed to see if there is a relationship between credit risk management practices and loan portfolio losses in commercial banks in Kenya. It also tried to look at the most preferred practice in commercial banks and the effects on loans portfolio losses. Since the study was descriptive, the researcher looked at the implications of having trained staff, risk identification, risk policies, credit scoring and analysis, approval of loans, risk mitigation and monitoring tools and skills in risk management for loans portfolio for a period of five (5) years i.e. 2007 - 2011. This was compared to the movement of NPLs and provisions during the same period. According to Mugenda (2008), a descriptive study is concerned with finding out the what, and how a phenomenon and as such enabled the study achieve its objectives.

3.3 Population

The target population of study was all 42 commercial banks and one mortgage bank in Kenya duly licensed by Central Bank of Kenya as at 1st January 2007 (see Appendix 1). For the purpose of this study, and for unbiased findings, all the 42 banks were studied to verify the practices in each.

For consistence in the study, all units studied qualified only if the bank had operated for more than five years after licensing by Central Bank of Kenya. This was because; a young bank may not be practicing some of the information sought and may give wrong information and may have led to a bias in findings. The study was carried out in the city of Nairobi which hosts majority of many commercial banks head offices with the reliable management who facilitated the information. The study sampled head of credit risk manager from department dealing with risk management as they were in a good position of offering the most informed response on the same. This sample was purposively taken.

3.4 Data Collection Methods

This study used both primary and secondary data. Primary data sought for was mostly looking at the practices applied by commercial banks in loan portfolio management. Secondary data related to the NPLs and loans write offs rate in the studied commercial banks. Secondary data was collected from annual financial reports whereas primary data was gathered using questionnaires from the credit managers/officers through the drop and pick method (see Appendix 3). Questionnaires were preferred as their responses are gathered in a standardized way making them more objective than interviews, relatively quick to collect information and potential information can be collected from a large portion of a group (Burns, 2000).

The questionnaires used Richter scale to measure weights of variables as applied by different banks as well some close-ended questions for qualitative and quantitative data respectively. Much of the primary data tried to investigate when, how and what are the weights given to certain practices in managing credit risk. To know the weights applied in each practice, a Richter scale was used to show the intensity of each practice. The primary data collected supplied the independent variables which were compared with secondary which was deemed to be the dependent variable.

3.5 Data Analysis Method

Quantitative data which was collected using closed ended and scaled data generated from questionnaires, was coded, weighted, numbered and classified under the different variables for easy identification and then summarized in answer summary sheet. Similarly responses from unstructured questions on opinion testing were written in a separate sheet and organized in themes. These themes were used to answer the research questions. Mugenda and Mugenda (2003) observed that statistical computation done in descriptive statistics includes: frequencies, percentages, means, modes, medians, standard deviation, variances, and these will be used in this study. Descriptive statistics were used to analyze the primary data of quantitative nature. Statistical Package for Social Sciences (SPSS) was used to analyze the data. Chi-square test was also used to test for association between categorical variables.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter outlines the analysis and findings of collected secondary data relating to the demographics, certain practices in managing credit risk and the NPLs and loans write offs from the study's target population which comprised of all 42 registered commercial banks by the Central Bank of Kenya as at 1st January 2007. The study's overall percentage of representation of the registered commercial banks was 86% (36/42) which according to Mugenda and Mugenda (2003), a response rate of 70% is very good for analysis and reporting. The remaining 24% of the commercial banks either did not respond or inadequately completed the study's questionnaire.

4.2 Demographics

This section outlines the demographics of the respondents' (credit managers/officers) and the responding commercial banks. Figure 4.1 illustrates the respondents' total work experience in credit risk management. According to the figure, 25% of the respondents' had worked in credit risk management for between 11 and 20 years. 22% had worked for between 21 and 30 years, 17% had worked for between 5 and 10 years, another 17% had worked for less than 5 years, 14% had worked for between 31 and 40 years, while the remaining 6% had worked for 41 years and above. This finding indicates that majority of the credit managers/officers had worked in credit management for more than twenty one (21) years; hence they had adequate experience and technical know-how on credit risk management practices.

Figure 4.1: Respondents' total work experience in credit risk management

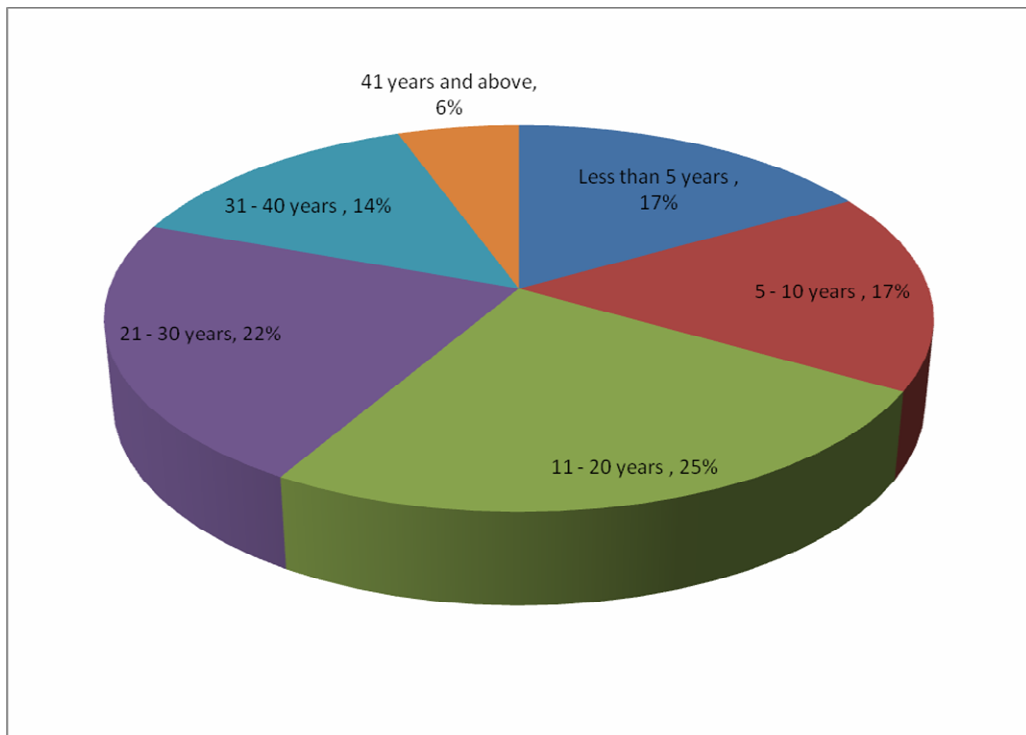


Figure 4.2 illustrates the respondents' total work experience in the banking industry. According to the figure, 33% of the respondents' had worked in the banking industry for between 21 and 30 years. 31% had worked for between 11 and 20 years, 11% had worked for between 5 and 10 years, another 11% had worked for between 31 and 40, 8% had worked for less than 5 years, while the remaining 6% had worked for 41 years and above. This finding indicates that majority of the credit managers/officers had worked in credit management for more than twenty one (21) years; hence they had adequate experience and technical know-how on the study's objective which was to establish if there is a relationship between credit risk management practices and loans losses in commercial banks in Kenya.

Figure 4.2: Respondents' total work experience in the banking industry

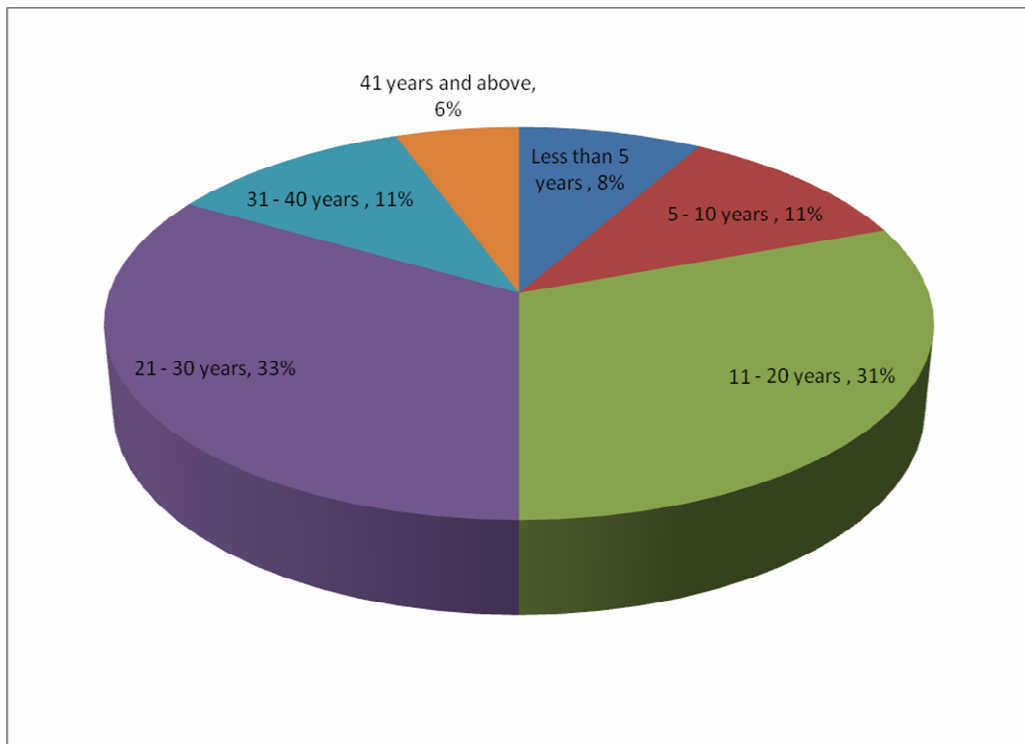


Figure 4.3 illustrates how the responding commercial bank's credit risk management functions. According to the figure, 64% of the commercial banks had centralized credit risk management, while 36% had decentralized credit risk management. This finding indicates that majority of commercial banks in Kenya had centralized credit risk management meaning that credit risk management practices were adopted and implemented holistically within the entire organization. This finding is in line with Fatemi and Glaum (2000) who indicated that for stable and continuity in commercial banks sound holistic credit risk management practices are inevitable. Adoption of this sound practices will lead to enhancement value of the firm and increased shareholder wealth. The value enhancement arises from minimization of running cost, taxes, less financial distresses as the firms cash flow is regulated hence positive Net present value (NPV).

Figure 4.3: Commercial bank's credit risk management functions

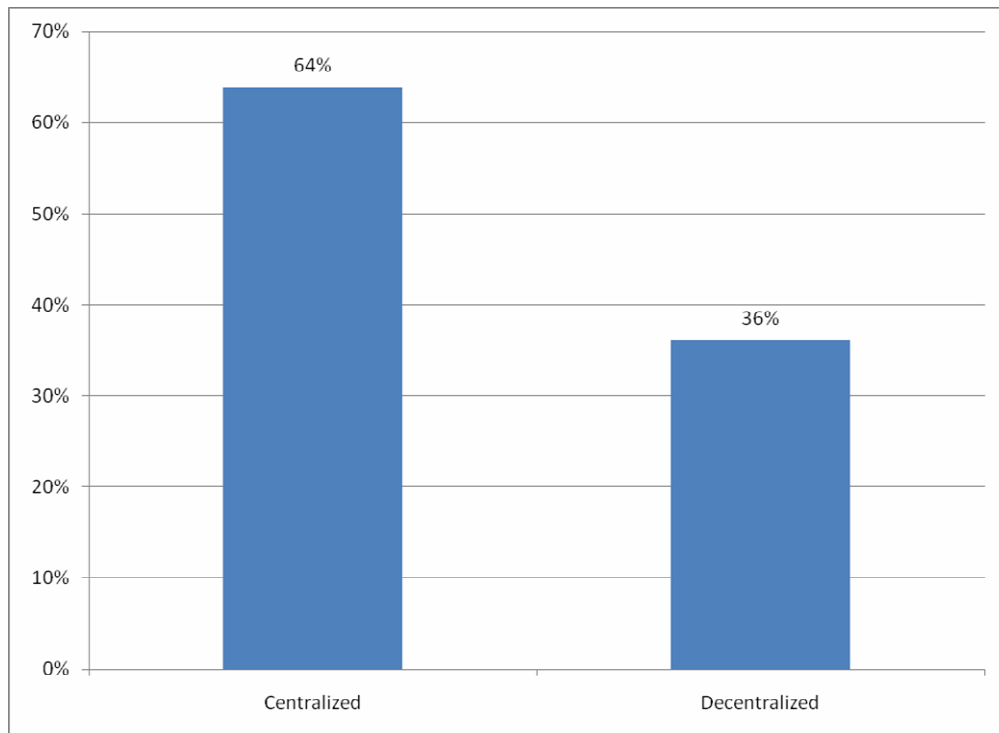


Figure 4.4 illustrates the presence of credit risk management information system to effectively measure, monitor, control and identify risk within the respondent commercial banks in Kenya. According to the figure, 67% of the commercial banks had in place credit risk management information system to effectively measure, monitor, control and identify risk, while 33% did not have similar information systems in place. This finding indicates that a significant number of commercial banks in Kenya had not put in place credit risk management information systems to effectively measure, monitor, control and identify risk. This finding is in line with Khan and Ahmad (2001) who conducted a survey of risk management practices and found that on average the lowest percentage is on the measuring, mitigating and monitoring risk that is 0.69 score as compared to risk management policies and procedures that is 0.8 and internal control of organization being 0.7.

Figure 4.4: Presence of credit risk management information system

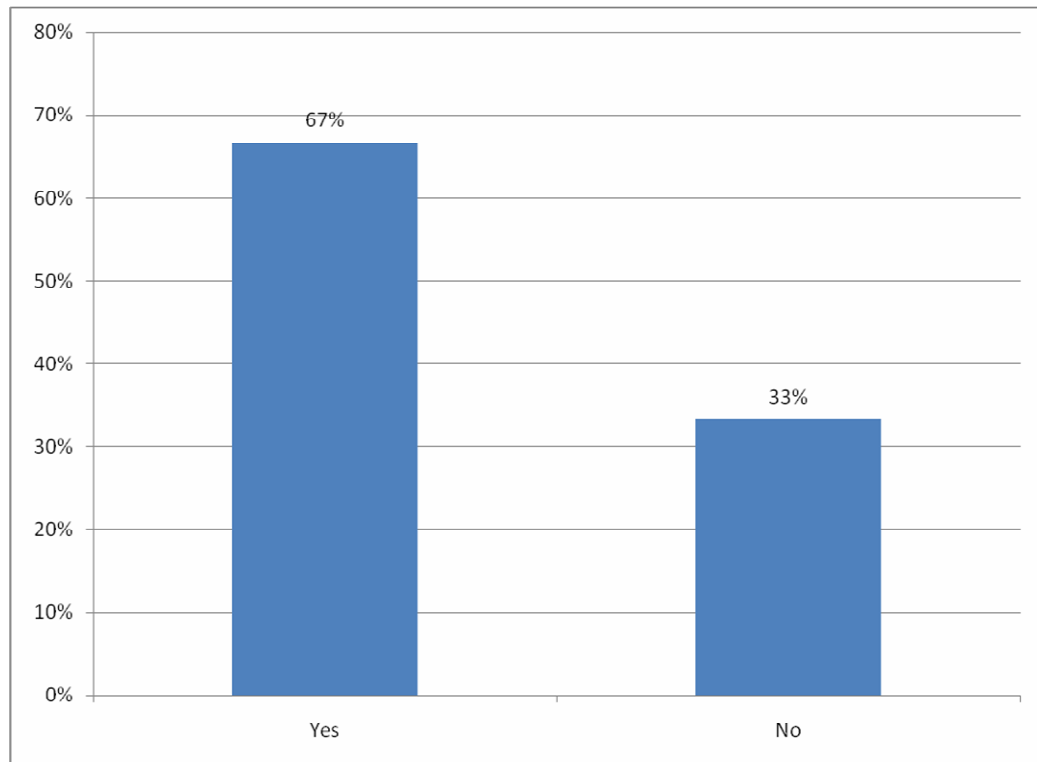
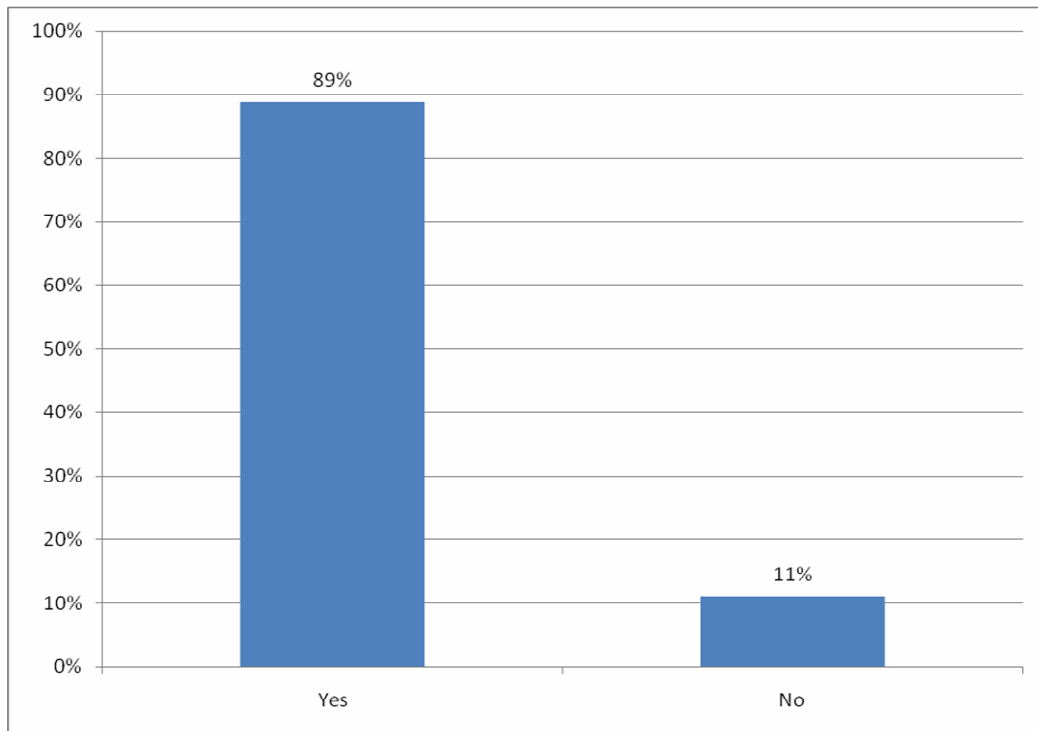


Figure 4.5 illustrates whether the commercial banks' management welcomed the recent credit sharing information Act and direction through credit bureaus. According to the figure, 89% of management within the commercial banks welcomed the recent credit sharing information act and direction through credit bureaus, while 11% did not welcome the recent credit sharing information act and direction through credit bureaus. This finding indicates that majority of management of commercial banks in Kenya recognized the need for information sharing among players within the industry in order to minimize losses arising from loans. However, it was evident that few managers did not welcome the credit sharing information Act which could be caused by failure to understand the provisions of the Act and/or resistance to change in policy and practice.

Figure 4.5: Respondents' total work experience in the banking industry



4.3 Regression Analysis

In this study, the “simultaneous” method (which SPSS calls the Enter method) was used whereby I specified the set of predictor variables which included: having a credit policy in place; proactive provision of bad debts; application of 80/20 rule management; on job the training; reactive provision of bad debts; termination of contracts and engaging 3rd parties; loan application and analysis; independent credit department; and taking collaterals or guarantees that made up the model below.

$$1/NPLs = C + \beta_1 J_{tr} + \beta_2 W_{et} + \beta_3 W_{eb} + \beta_4 M_{fc} + \beta_5 M_{fd} + \beta_6 M_{it} + \beta_7 Cs + \dots + \beta_n P_n + e$$

Where:-

C – The minimal acceptable non performing loan (Constant)

β_{1-n} – Beta Factor one, two and so on to the practices applied to minimize loans losses

J_{tr} – On job training

W_{et} – Work experience in credit risk Management

W_{eb} – Work experience in banking industry

M_{fc} – Centralized credit function

M_{fd} – Decentralized credit function

M_{it} – Credit Information System

C_{is} – Credit information sharing

P_n – The n^{th} credit risk management practice

E – Stochastic error

Npl – None performing loans

The success of this model in predicting the criterion variable was then assessed. Table 4.1 illustrates the model summary used in this study and indicates the adjusted R Square value which gives the most useful measure of the success of the model, hence from the table it is evident that the model had accounted for 23.9% of the variance in NPLs and loans write offs (criterion variable).

Table 4.1: Variables Entered/Removed

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.659	.435	.239	14081746.2258	.435	2.223	9	26	.054

a. Predictors: (Constant), Having a credit policy in place, Proactive provision of bad debts, Application of 80/20 rule management, On Job the Training, Reactive provision of bad debts, Termination of contracts and engaging 3rd parties, Loan application and analysis, Independent credit department, Taking Collaterals or Guarantees.

b. Dependent Variable: Loan Losses

Table 4.2 illustrates the coefficients which give a measure of the contribution of each variable to the study's model. Independent credit department (Beta = -.719) and Taking Collaterals or Guarantees (Beta = -.481) positively impacted on loan losses but taking of collaterals or guarantees was not significant at 95% confidence level. This implies that although the increase in taking of collaterals or guarantees results in an increase in loan losses, this relationship is not significant for commercial banks in Kenya. However, it is important to note that this finding infers that taking of collaterals or guarantees may lead to increases in loan losses due to various reasons including but not limited to: inadequate or insufficient loan guarantees and/or losses incurred in debt recovery through loan collaterals and guarantees. All the other predictor variables had a significant negative relationship with loan losses implying that an increase in the specified credit risk management practices resulted in a decrease in loan losses.

Table 4.2: Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-286775362.995	97803343.158		-2.932	.007
Independent credit department	-17359068.984	7801625.795	.719	-2.225	.035
Loan application and	6561009.874	8739801.022	-.206	.751	.460

analysis					
On Job the Training	24460285.169	8063561.631	-.768	3.033	.005
Taking Collaterals or Guarantees	-10741307.869	7978946.657	.481	-1.346	.190
Proactive provision of bad debts	2453038.642	5093919.283	-.099	.482	.634
Reactive provision of bad debts	14413565.874	8225742.382	-.450	1.752	.092
Application of 80/20 rule management	15994982.807	7347935.966	-.593	2.177	.039
Termination of contracts and engaging 3rd parties	22049750.323	6656926.198	-.850	3.312	.003
Having a credit policy in place	26581328.857	11249282.184	-.769	2.363	.026

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary and Conclusions

The study's research findings indicate that a significant number of commercial banks in Kenya had not put in place credit risk management information systems to effectively measure, monitor, control and identify risk, and that majority of management of commercial banks in Kenya recognized the need for information sharing among players within the industry in order to minimize losses arising from loans. However, it was evident that few managers did not welcome the credit sharing information Act which could be caused by fear of competition, failure to understand the provisions of the Act and/or resistance to change in policy and practice. It can therefore be concluded that credit risk management practices are common among most of the commercial banks in Kenya and that management of these commercial banks appreciated government legislation relating to credit risk management through the introduction of the credit sharing information Act.

Findings further indicated that the model summary used in this study accounted for 23.9% of the variance in NPLs and loans write offs (loan losses) and that there was sufficient evidence that the model is useful in explaining the relationship between credit risk management practices and loans losses in commercial banks in Kenya. In addition, findings implied that although the increase in the independence of the credit department and taking of collaterals or guarantees results in an increase in loan losses, this relationship is not significant for commercial banks in Kenya. All the other predictor variables had a negative relationship with loan losses implying that an increase in the

specified credit risk management practices resulted in a decrease in loan losses. It can therefore be concluded that there is a significant negative relationship between credit risk management practices and loans losses in commercial banks in Kenya.

This finding further supports the view that the bank managers should also rely on the effectiveness of the imposed regulations to anticipate the future risks. From the different financial indicators, the position of the institution on the market failure still depends on the internal process and the actions of the people. The economic theory in banking encompasses the interest and income theory in which is the basis of the cash flow approach in bank lending Akperan, (2005).

5.2 Recommendations

In line with the findings and conclusions of the study the following were recommended:

On the effect of policy and decision making of management of commercial banks in Kenya, it is advisable that sound credit risk management practices are adopted and implemented especially through credit risks management information systems. Management should also actively participate in the legislation of credit risk management by government through the Kenya Bankers Association especially in the implementation of the credit sharing information Act.

Board of directors of commercial banks in Kenya and Kenya Bankers Association should consider provisions for specific credit risk management practices to be adopted and implemented uniformly by commercial banks in Kenya. Further the two should establish policies and guidelines of determining NPLs and loans write offs to avert excessive loan losses by commercial banks in Kenya.

5.3 Suggestions for Further Study

The researcher further recommends that a study be undertaken to establish the factors affecting and challenges faced in the adoption of credit risk management practices by commercial banks in Kenya. Findings from the study will shed light into the specific contributors to the success and/or failure of credit risk management practices and their impact on loan losses by commercial banks in Kenya.

5.4 Limitations of the study

The major limitations of this study related to time constraints, limited financial resources and geographic distance between the commercial banks in Kenya. Time and geographical constraints were overcome by the utilization of professionally trained research assistants without compromising the validity and reliability of the research findings, while the limited financial resources available were spent on research activities that could not be undertaken solely by the researcher. In addition, the researcher did not overlook the major limitation of descriptive research design which is that the design makes it difficult to explain phenomena that occur over time, hence the study's findings are only applicable to the study's time frame.

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APPENDIX ONE

LIST OF LICENCED BANKS AS AT 1st JANUARY 2008

1	ABC Bank (Kenya)
2	Bank of Africa
3	Bank of Baroda
4	Bank of India
5	Barclays Bank
6	CFC Stanbic Bank
7	Chase Bank (Kenya)
8	Citibank
9	Commercial Bank of Africa
10	Consolidated Bank of Kenya
11	Cooperative Bank of Kenya
12	Credit Bank
13	Development Bank of Kenya
14	Diamond Trust Bank
15	Dubai Bank Kenya
16	Eco bank
17	Equatorial Commercial Bank
18	Equity Bank
19	Family Bank
20	Fidelity Commercial Bank Limited
21	Fina Bank
22	First Community Bank
23	Giro Commercial Bank
24	Guardian Bank
25	Gulf African Bank
26	Habib Bank
27	Habib Bank AG Zurich
28	I&M Bank
29	Imperial Bank Kenya
30	Jamii Bora Bank
31	Kenya Commercial Bank
32	K-Rep Bank
33	Middle East Bank Kenya
34	National Bank of Kenya
35	NIC Bank
36	Oriental Commercial Bank
37	Paramount Universal Bank
38	Prime Bank (Kenya)
39	Standard Chartered Kenya
40	Trans National Bank Kenya
41	United Bank for Africa
42	Victoria Commercial Bank
43	Housing Finance Ltd – Mortgage Bank

Source: Central Bank of Kenya 2007

APPENDIX TWO

Sample Letter of Introduction

10th October, 2013

**The Human Resources Manager,
XYZ Bank Ltd,
Nairobi.**

**RE: REQUEST TO COLLECT DATA FOR MBA RESEARCH PROJECT IN
YOUR BANK**

I am a student at the University of Nairobi pursuing a Master of Business Administration program. Pursuant to the pre-requisite course work, I am conducting a research project on **THE RELATIONSHIP BETWEEN CREDIT RISK MANAGEMENT PRACTICES AND LOAN PORTFOLIO LOSSES – A STUDY ON COMMERCIAL BANKS IN KENYA**. The focus of my research will be commercial Banks in Kenya and this will involve use of interview administered through questionnaires to the heads of credit risk management in the random sampled commercial banks in Kenya.

I kindly seek your authority to conduct the research in your bank through interview and use of relevant documents. I have enclosed an introductory letter from the University. Your assistance is highly valued.

Thank you in advance.

Yours faithfully,

Alex Muasya

APPENDIX THREE
Research Questionnaire

PART A: GENERAL INFORMATION

1. Name of the bank

.....

2. How long have your bank been operating in Kenya

Less than 5 years [] More than 5 years []

3. What is your designation in the department?

.....

4. What is your total work experience in credit risk management in years?

Less than 5 years [] 5 – 10 years [] 11 – 20 years []

21 – 30 years [] 31 – 40 years [] 41 years and above []

5. How long have you worked in the banking industry?

Less than 5 years [] 5 – 10 years [] 11 – 20 years []

21 – 30 years [] 31 – 40 years [] 41 years and above []

PART B: GENERAL RISK MANAGEMENT STRUCTURES & PRACTICES

6. Does your bank have a credit risk management function?

Yes [] No []

7. Who heads the credit risk management function in your bank? (Title)

.....

8. Is your bank's credit risk management functioning centralized or decentralized?

Centralized [] Decentralized []

9. Does your bank have credit risk manual, policy and program for all possible risks exposures?

Yes [] No []

10. If yes in 9 above, is it fully and comprehensively documented or implied?

Documented [] Implied []

Any other (specify)

.....

.....

12. Does your bank have credit risk management information system to effectively measure, monitor, control identify risk?

Yes [] No []

13. Have your bank management welcome the recent credit sharing information act and direction through credit bureaus?

Yes [] No []

PART C: SPECIFIC CREDIT RISK MANAGEMENT PRACTICES

14. What weight has your bank put on the following credit risk practices in loans portfolio management for the last five years i.e. 2008- 2012?

Tick as appropriate - Where 0 is the lowest and 5 is the highest practiced in your bank.

Kindly be as honest as possible.

Having a credit policy in place	[0]	[1]	[2]	[3]	[4]	[5]
2008						
2009						
2010						
2011						
2012						
Independent credit department	[0]	[1]	[2]	[3]	[4]	[5]
2008						
2009						
2010						
2011						
2012						
Strict credit policy & procedures following	[0]	[1]	[2]	[3]	[4]	[5]
2008						
2009						
2010						
2011						
2012						
Loan application and analysis	[0]	[1]	[2]	[3]	[4]	[5]
2008						
2009						
2010						
2011						
2012						

On Job the Training	[0]	[1]	[2]	[3]	[4]	[5]
2008						
2009						
2010						
2011						
2012						
Taking Collaterals or Guarantees	[0]	[1]	[2]	[3]	[4]	[5]
2008						
2009						
2010						
2011						
2012						
Pricing to cushion any exposure	[0]	[1]	[2]	[3]	[4]	[5]
2008						
2009						
2010						
2011						
2012						
Proactive provision of bad debts	[0]	[1]	[2]	[3]	[4]	[5]
2008						
2009						
2010						
2011						
2012						
Reactive provision of bad debts	[0]	[1]	[2]	[3]	[4]	[5]
2008						
2009						
2010						
2011						
2012						

Application of 80/20 rule management	[0]	[1]	[2]	[3]	[4]	[5]
2008						
2009						
2010						
2011						
2012						
Termination of contracts and engaging 3 rd parties	[0]	[1]	[2]	[3]	[4]	[5]
2008						
2009						
2010						
2011						
2012						
Referencing from credit bureaus	[0]	[1]	[2]	[3]	[4]	[5]
2008						
2009						
2010						
2011						
2012						

15. Other than the referenced practices, which other practice do you think could significantly minimize the losses arising from loans in your bank?

- i).....
- ii).....
- iii).....

THANK YOU FOR YOUR TIME AND COOPERATION