

**THE EFFECT OF CREDIT RISK MANAGEMENT PRACTICES ON  
THE LEVEL OF NON-PERFORMING LOANS. A CASE STUDY OF  
COMMERCIAL BANKS LENDING TO SMES IN KENYA**

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## DECLARATION

THIS RESEARCH PROJECT IS MY ORIGINAL WORK AND HAS NOT BEEN PRESENTED FOR A DEGREE IN ANY OTHER UNIVERSITY

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## **DEDICATION**

This Research project is dedicated to my parents and sisters who form an integral part of my life.

## ABSTRACT

Small and medium Enterprises Sector was formerly considered as the missing middle because the businesses were too small to be financed by commercial banks and too large to be financed by microfinance institutions. This financing gap has however started shrinking, but on the other hand the high percentage of nonperforming loans of commercial banks are associated with the SME sector. The immediate consequence of nonperforming loans in the banking industry leads to bank closure. The objective of the study was to establish the effect of credit risk management techniques used to evaluate SMEs on the level of Nonperforming loans by Commercial banks in Kenya.

A descriptive study of credit risk management techniques used by commercial banks in Kenya was carried out on all the banks. A regression analysis was developed in order to examine the relationship credit risk management and SME Nonperforming loans in Banks in Kenya.

The study established that there is a negative relationship between Credit Risk Management and Non performing loans. Implying that the level of nonperforming loans is inversely affected by credit risk management practices. To identify, analyse, monitor and mitigate loan losses in the SME sector, most banks visited their SME business premises, sent credit reminders, used risk based pricing and collateralized their loans. The paper recommends a thorough re examination of economic importance of SMEs in Kenya and calls upon more efficient support strategy and fund allocation from the government and banks.

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## **ABBREVIATIONS**

CBK	:	Central bank of Kenya.
CRB	:	Credit Reference Bureaus.
FSD	:	Financial Sector deepening.
GTZ	:	German Agency for Development Co-operation
NPL	:	Non Performing Loans
SME	:	Small and Medium Enterprises.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background

Credit creation is the main income generating activity for the banks. But this activity involves huge risks to both the lender and the borrower. When financial institutions issue loans, there is a risk of borrower default. When banks collect deposits and on-lend them to other clients, they put clients' savings at risk. The risk of a trading partner not fulfilling his or her obligation as per the contract on due date or anytime thereafter can greatly jeopardize the smooth functioning of a bank's business. A bank with high credit risk has high bankruptcy risk that puts the depositors in jeopardy. Among the risks that face banks, credit risk is one of great concern to most bank authorities and banking regulators. When poorly managed, risks begin to result in financial losses, investors, lenders, borrowers and savers tend to lose confidence in the organization and funds begin to dry up. Managing credit risk is a complex task for any financial organization, and increasingly important in a world where economic events and financial systems are linked.

Credit problems, especially weakness in credit risk management have been identified to be a part of the major reasons behind banking difficulties. Poor loan quality has its roots in the information processing mechanism. (Brown Bridge, 1998) observed that these problems are at their acute stage in developing countries. The problem often begins right at the loan application stage and increases further at the loan approval, monitoring and controlling stages, especially when Credit Risk Management guidelines in terms of policy and strategies/procedures for credit processing do not exist or are weak or incomplete. Loans that constitute a large proportion of the assets in most banks' portfolios are relatively illiquid and exhibit the highest Credit risk (Koch and MacDonald, 2000). Adverse selection and moral hazards have led to substantial accumulation of non-performing accounts in banks (Bester, 1994).

In the absence of scientific methods of credit assessment, subjective decision making by the management may lead to extending credit to persons with reputation for non financial acumen or to meet personal agenda. Credit risk management is a structured approach to managing uncertainties through risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources. The strategies include transferring to another party, avoiding the risk, reducing the negative effects of the risk, and accepting some or all of the consequences of a particular risk.

Commercial banks in Kenya have faced difficulties over the years, for a multitude of reasons; the major cause of serious financial problems continues to be directly related to lax credit standards for borrowers, poor portfolio risk management or lack of attention to changes in the economic, circumstances and competitive climate (Central bank of Kenya Annual Supervision Report 2006)

The Central bank of Kenya (CBK 2006) developed risk management guidelines for the purpose of providing minimum direction to banks on risk management and create a working framework befitting international best practices which require banks to have a fully independent credit risk management responsible for capital adjustment and provision for escalating non-performing loans

Kimeu (2008) argued that the credit risk management function in banks needs to be a robust process that enables the banks to proactively manage the loan portfolios to minimize the losses and earn an acceptable level of return to its shareholders. The importance of credit risk management is recognised by banks for it can establish the standards of process, segregation of duties and responsibilities.

#### **1.1.1. Definition of Small Medium Enterprises (SMEs)**

According to the Financial sector Deepening in Kenya (2008) SMEs are considered as those businesses that are too large for micro but are still not able to access appropriate

services from formal institutions also in terms of turnover the definition of SME varies between banks but the general range is turnover of Ksh 4 million to Ksh 100 million with a workforce of 5 to 50 employees.

The size of the facility is also a measure of SMEs, loan sizes typically vary between Ksh 50,000 to 150,000 for microenterprises and Ksh 400,000 to even as high as 20-30 million for mid sized firms.

Migiro & Wallis (2006) categorises SMEs in Kenya as follows, primarily by the number of employees: less than five employees are referred to as micro-enterprises; between five to forty nine workers are classified as small-scale enterprises; from fifty to ninety nine workers are classified as medium-scale enterprises and from one hundred or more workers are categorized as large-scale enterprises.

Therma (2009) defines five categories of small and medium businesses which includes; Survivalist enterprise which is considered pre-entrepreneurial and includes hawkers, vendors and subsistence farmers. Secondly Micro enterprise usually which usually lack formality in terms of registration and includes shops, minibus taxis and household industries. The third category is very small enterprises which operate in the formal market and have access to technology and include mining, electricity, manufacturing and construction sectors. His fourth category is small enterprises which are generally more established than very small enterprises and exhibit more complex business practices and the fifth category is medium enterprises which are often characterised by the decentralisation of power to an additional management layer.

### **1.1.2. The impact of SME on economic development**

For both developing and developed countries, small and medium scale firms play important roles in the process of industrialization and economic growth. Apart from increasing per capita income and output, SMEs create employment opportunities, enhance

regional economic balance through industrial dispersal and generally promote effective resource utilization considered critical to engineering economic development and growth. SMEs entrepreneurs in Kenya have contributed greatly to the growth of the Kenyan economy. The sector contributes to the national objective of creating employment opportunities training entrepreneurs, generating income and providing a source of livelihood for the majority of low income households in the country.

Kenya's development challenge therefore largely remains that of identifying sustainable ways of enabling the SMEs. The government recognizes that the challenge of sustainable development in Kenya is eradication of poverty and the achievement of sustained broad based economic growth. It is for this reason that the government in the 1990's through the CBK relaxed the entry requirements of the non banking financial institutions to promote locally owned financial institutions.

### **1.1.3. Obstacles to Small Medium Enterprises Financing by Commercial Banks**

The first obstacle that SMEs face is Informational Asymmetries. Entrepreneurs possess important information on their businesses that cannot be easily accessed by prospective lenders or outside investors. This leads to two problems. First, the lender/investor may not be able to differentiate adequately between 'high quality' and 'low quality' companies and projects. Once the lenders/investors have supplied the funding, they may not be able to assess whether the enterprise is utilizing the funds in an appropriate way (the 'moral hazard' problem). To mitigate these problems, bankers and outside investors may adopt precautionary measures, such as requiring that financing be collateralized.

Informational asymmetries tend to pose more severe problems for SME, than for larger business. The information that SME can realistically provide to external financiers (in the form of financial accounts, business plans, feasibility studies, etc.) often lacks detail and rigor. This problem is often aggravated by the low level of education of small

entrepreneurs, who may not be in the position to adequately articulate their case. This problem is particularly acute in developing countries. The information supplied to bankers by family-owned SME is often not fully accurate and realistic, and opaque behaviour may prevail. Under these conditions, outside financiers tend to adopt a very cautious attitude towards SME, and either reduce the amount of financing sought or refuse it altogether.

Secondly SMEs have a higher risk profile compared to the big Corporate. This is because SMEs face a more uncertain competitive environment than larger companies: they experience more variable rates of return and higher rates of failure. Second, SME are comparatively less equipped in terms of both human and capital resources to withstand economic adversities. Third, there is the problem of inadequate accounting systems, which undermines the accessibility and reliability of information concerning profitability and repayment capacity. In developing countries, there is the added problem of a more volatile operating environment, which has a negative impact on the security of transactions. There is a greater risk that lenders will not get paid.

Lack of Collateral is the third obstacle faced by SMEs when trying to access funds, lenders typically request collateral in order to mitigate the risks associated with the 'moral hazard'. The lack of collateral is probably the most widely cited obstacle encountered by SME in accessing finance. The amount of collateral required in relation to the loan size is a measure frequently adopted to empirically assess the severity of the financing gap. In some cases, the enterprise may be unable to provide sufficient collateral because it is too new. That problem is closely related to high risk. In some cases, the lender may deem the collateral insufficient in view of the size of the loan requested. In other words, the proposed expansion project may be too large in comparison with the current size of the firm. Lack of collateral can be viewed more as a symptom than as a direct cause of the difficult relations between SME and providers of finance.

## 1.2 Statement of the Problem

The provision of credit is an important tool for raising the incomes of SMEs, mainly by mobilizing resources to more productive uses. However, at low levels of income, the accumulation of such capital may be difficult. Having access to finance gives SMEs the chance to develop their businesses and to acquire better technologies for production, therefore ensuring their competitiveness, however SMEs face challenges when it comes to sourcing for initial and expansion capital funds from commercial banks. Commercial banks and other formal institutions fail to cater for the credit needs of SMEs however, mainly due to their lending terms and conditions.

Financial intermediaries deem SMEs to have very high risk profiles and also information asymmetry. According to a research by the financial sector deepening (2008) less than 20 percent of small to medium sized enterprises (SMEs) in Kenya have ever received credit from formal financial institutions. Access is limited due to challenges in assessing SME risk in a cost-effective manner, lenders in Kenya address this risk-assessment problem either by not lending to SMEs at all or by requiring collateral and charging high interest rates. If this difficult access to financing is not handled, the development of SMEs as one of the economy backbone will be hampered since they cannot access sufficient long-term borrowing to allow them to modernize their operations.

Existing SMEs cannot easily access funding because they have underdeveloped business that have a very short history hence banks are often not willing to lend. Furthermore the promoters lack securities that can be given to lenders. The promoters have neither the education nor the ability to convince investors or financial intermediaries. Owners may also not have a saving history with financial intermediary that can form the basis for savings-led credit Bierman (2005). Start-up business also face challenges when trying to



access credit facilities because such ventures have no historical financial statements to confirm credit history.

According to Cousin (2007), most of the bank failures were caused by non performing loans. Arrears were mostly from Small and Medium Enterprises affecting more than half the loan portfolios were typical of failed banks. Unavailability and rationing of credit to finance Small and Medium Enterprises working capitals and investments might trigger business failure which in turn affects the quality of bank loans.

This motivated the carrying out of this study to establish the relationship between the credit risk management techniques used to evaluate SMEs and the level of non performing by commercial banks in Kenya.

Many research studies have focuses on reasons why SMEs have limited access to funds, little has been written on the credit risk management techniques that have been used to evaluate SMEs by Commercial banks in Kenya. This study will focus on the credit risk management techniques used by Commercial banks to evaluate SMEs.

### **1.3 Objectives**

To establish the credit risk management techniques used to evaluate SMEs in Kenya.

To establish the effect of Credit risk management techniques used to evaluate SMEs on the level Non performing loans by commercial banks in Kenya.

### **1.4 Importance of the Study**

The study will assist banks in their endeavour to cultivate better methods of managing credit for the SME sector through understanding the issues that are faced within the sector and the factors that determine success.

The study will also help the Government and Policy makers in formulating policy that relates to the regulatory environment of the country as far as micro credit activities are concerned. As the sector grows, the government has to come up with policies that address the various challenges within the sector to reduce any resultant chaos and to facilitate faster growth with minimum drawbacks.

Future researchers and Scholars will find this study important in facilitating an increase in the general knowledge of the subject and will act as a reference material to future researchers and scholars who may wish to embark on related studies. Research in the various components of the SMEs sector will help to unearth hitherto unknown information that will go a long way in facilitating further understanding of the SME sector.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.0 Introduction**

This chapter examines empirical studies that have been done in the area of credit risk management.

### **2.1 Theoretical Framework**

#### **2.1.2 Information Theory of Credit**

Information Theory of credit states that the amount of credit to firms and individuals would be larger if financial institutions could better predict the probability of repayment by the potential customers. Public or private credit registries that collect and provide broad information to financial institutions on the repayment history of potential clients are crucial for deepening credit markets. The information that each party brings to a credit transaction will have important implications for the nature of credit contracts; the ability of credit markets to match borrowers and lenders efficiently and the role played by the rate of interest in allocating credit among borrowers. When lenders know more about their borrowers, their credit history, or other lenders to the firm, they are not as concerned about the problem of financing non-viable projects, and therefore extend more credit (Stiglitz et al 1981)

#### **2.1.2 Power Theory of Credit**

The power theory of credit emphasizes that financial institutions would be more willing to extend credit if, in case of default, they could easily enforce contracts by forcing repayment or seizing collateral. The amount of credit in a country would then depend to some extent on the existence of legislation that protects the creditors' rights on the quality procedures that leads to repayment. When lenders can more easily force repayment, grab

collateral or even gain control of the firm, they are more willing to extend credit (Djankov et al, 2005)

## **2.2 Financial Risk**

The business of a financial institution is to manage financial risks, which include Credit risks, liquidity risks, interest rate risks, foreign exchange risks and investment Portfolio risks. Commercial banks put most of their resources into developing a methodology that reduces individual credit risks and maintaining quality portfolios.

### **2.2.1 Credit Risk**

Credit risk, the most frequently addressed risk for Commercial banks; it is the risk to earnings or capital due to borrowers late and non-payment of loan obligations. Credit risk encompasses both the loss of income resulting from the Commercial bank inability to collect anticipated interest earnings as well as the loss of principal resulting from loan defaults (GTZ 2000). This is the inherent risk of money not coming back whenever a commercial bank lends to a client.

Loans are the largest and most obvious source of credit risk, however financial institutions worldwide are increasingly facing credit risk in various financial instruments other loans including acceptances, trade financing, foreign exchange transactions, inter-bank transactions, bonds and guarantees. (Fun Ho et al 2009). Banks should have keen awareness of the need to identify, measure monitor and control credit risks as well as have adequate capital against these risks.

The goal of credit risk management is to maximize a bank's risk adjusted rate of return by maintaining credit risk exposure within the acceptable parameters. Institutions need to

manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. 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 lending organization (Basel Committee, 1999)

Credit risk includes both transaction risk and portfolio risk: Transaction risk refers to the risk within individual loans. Commercial banks mitigate transaction risk through borrower screening techniques, underwriting criteria, and quality procedures for loan disbursement, monitoring, and collection, While Portfolio risk refers to the risk inherent in the composition of the overall loan portfolio. Policies on diversification (avoiding concentration in a particular sector or area), maximum loan size, types of loans, and loan structures lessen portfolio risk.

### **2.2.2 Sources of Credit Risk**

Poor or weak appraisal of loans is one of the major reasons for delinquencies. Before giving any loan, client's repaying capacity, status of business and cash flows must be assessed. This helps in taking loan decision that whether a client should be given a loan and about appropriate volume of loan. Poor appraisal can lead to loans going to unworthy clients or disbursement of higher amount loans. Loans given beyond repaying capacity puts clients in stress situation as they do not have sufficient income to repay installments resulting in delinquencies

Unclear communication about product and methodology. Clear communication of policies and procedures is very important. If the clients do not know the policies and procedures it can result in confusion and delinquencies. Delinquencies can also happen as an aftermath of a natural disaster such as flood, drought, earthquakes or epidemic.



### **2.2.3 Need for Credit Risk Management**

Lending has been and still is the mainstay of financial institutions and this is more true to emerging economies of developing countries where capital markets are not well developed. To most of the transition economies, lending activities has been a controversial and difficult matter. This is because business firms on one hand are complaining about lack of credit and excessively high standards set by financial institutions, while financial institutions on the other hand have suffered large losses on bad loans.

It has been found out that in order to minimize loan losses thus credit risk ,it is essential for financial institutions to have effective credit risk management systems in place (Basel 2010).Given the asymmetric information that exists between lenders and borrowers, financial institutions must have a mechanism that ensures that they not only evaluate default risk that is unknown to them in order to avoid adverse selection, but also that can evolve in order to avoid moral hazards. An effective system that ensures repayment of loans by borrowers is critical in dealing with asymmetric information problems and in reducing the level of loan losses, thus the long term success of any banking organization. Credit risk management is essential in optimizing the performance of financial institutions (Basel 2010)

According to Greuning and Bratonovic (2003) the basis of a sound credit risk management system includes guidelines that clearly outline the scope and allocation of bank credit facilities and the manner in which credit portfolio is managed that is how loans are originated, appraised, supervised and collected. Derban, Binner and Mullineux (2005)

recommended that borrowers should be screened especially by banking institutions in form of credit assessment.

Collection of reliable information from prospective borrowers becomes critical in accomplishing effective screening as indicated by symmetric information theory. Qualitative and Quantitative techniques can be used in assessing the borrower although one major challenge of using qualitative models is their subjective nature. However according to Derban, Binner and Mullinuex (2005) borrowers attributes assessed through qualitative models can be assigned numbers with the sum of the values compared to a threshold.

This technique minimizes processing costs reduces subjective judgements and possible biases. The rating systems will be important if it indicates changes in expected level of credit loan loss. Brown Bridge (1989) conclude that quantitative models make it possible to numerically establish which factors are important in explaining default risk, evaluating the relative degree of importance of the factors, improving the pricing of default risk, screening out bad loan applicants and calculating any reserve needed to meet expected future losses (Derban et al 2005).

## **2.3 Credit Risk Management process**

### **2.3.1 Credit Risk Identification**

Credit risk Identification is vital for effective risk management. For Commercial banks to manage credit risks facing them effectively, they need to know and identify these credit risks. The first step in credit risk identification is implementation of the credit risk

management function to establish crucial observation areas inside and outside the corporation. Christen and Pearce 2005)

The use of Credit policies to establish the framework for lending and reflect an institution's credit culture and ethical standards. To be effective, policies must be communicated in a timely fashion, be implemented through all levels of the organization by appropriate procedures and revised periodically in light of changing circumstances.

### **2.3.2. Credit Risk Mitigation**

Tools used to control credit risk include the use of Covenants, use of adequate collateral, Use of personal guarantors, use of savings /deposit accounts and also insurance against default. Continual participation in the credit risk management policy and strategies.

Peer or group lending as commonly known, mitigates credit risk by evading the risk of lending without collateral, over a large number of borrowers within the group acts as insurance cover for the institution. Those members of the group who have not received the loans become agents of the bank in debt collection so that they can have access to their loans also. The Credit Officers work is transferred to the group which has to do overtime here, because they have interest. Group Savings may act as guarantee instead of formal collateral.

### **2.3.3 Credit Risk Analysis**

The lending decision is based on an evaluation of the firm's financial position and its future prospects, in a process known as credit risk analysis. It consists in estimating the probability that a borrower fails to return its credit in accordance to the terms agreed (probability of default) and the expected loss that the bank would incur in case of default (loss given default). The process involves an estimation of the firm's future cash flow and



of the value of the assets that could be provided as collateral or security for the credit in the event of default (Guimon 2005)

Financial Statement rule is a lending rule which places emphasis on evaluating information from the firm's financial Statements. The decision to lend and terms of the contract are principally based on the strengths of the firm's balances sheet. Financial statement lending is best suited for relatively transparent firms with certified audited financial statements. Thus, it is likely to be the rule of Choice for lending to large firms. But when adapting this rule for small firms, the firms must be ones with long histories, relatively transparent transactions and strong audited financial statements (Berger and Udell, 2001).

Credit-Scoring Rule involves attaching heavy statistical weights to the financial conditions and history of the principal owner given that the credit worthiness of the owner and that of the firm are closely related for most small businesses (Feldman 1997, Mester 1997) SME credit scores usually include financial characteristics from both the business and the business owner. Credit scoring model is used to identify credit risks and mitigating factors, evaluating borrower viability and growth potential, assessing entrepreneurial capabilities, determining financing requirements and earnings for bank, monitoring loan performance risks in crisis situations, and structuring facilities based on credit score ratings. Scoring systems utilize information relating to the traditional 5Cs of credit:

Character is the maturity, honesty, trustworthiness, integrity ,discipline ,reliability and dependability of a customer. Character is no doubt the most important quality in a client. A person of good character will pay his debts whether it is secured or not. Such a person will

disclose all the facts of his deal because his intentions are to seek guidance and help from the organization. When in problems such borrowers will adhere to the credit managers' request for alternative arrangements to pay his debt instead of hiding from the bank.

Secondly Capacity refers to a client's ability to service his debts fully. Even if he has good intentions but has no funds he will not be able to keep his loan repayment up to date. Capacity also refers to a client's record of performance. A client who has borrowed money from various institutions and paid regularly over long periods can be described as having experience of borrowing and paying. The client is disciplined and is likely to keep the good record. Occasionally credit managers come across clients who will tell them that they are good borrowers because this is their first loan. Unfortunately, one cannot say so because these clients are inexperienced. Thirdly, they may require collateral to secure the loan. This is the security given to secure the loan in terms of assets e.g. Vehicles, land, motor vehicles e.t.c.

Fourthly, Condition refers to the general economic environment or special conditions applying to the borrower of credit. Is the Commercial, socio-economic, technological and political environment conducive. Lastly Common sense this is the natural ability to make good judgement and behave in a practical and sensible way. Being prudent and reasonable in analyzing, presenting, using and interpreting financial data and other related business information. Additional Common sense is the reasonableness of the financial information provided to support the case for financing a project as an indication of the ability of the project to pay itself. While each of the above factors is important on their own right, they however should not be considered in isolation. While adverse record on each one is enough to reject an application, good reports on all aspects improve the probabilities of

success. Therefore these elements can be used individually or in combination, depending on the level of quality of credit appraisal required and the amount of credit involved. The credit scoring rule is meant to help financial institutions in Kenya to thoroughly evaluate and assess the credit worthiness of existing and potential customers before awarding them new or further credit and hence exposure of banks and the avoidance of non-performing loans. The credit scoring rule covers the entire area of credit risk and hence its application in credit risk appraisal will ensure that banks and financial institutions protect their assets against loss (Abedi 2000)

Relationship Lending Rule applies where the lender bases the decision to lend in substantial part on propriety Information about the firm and its owner through a variety of contacts over time. This Information is obtained through the provision of loans (Berger and Udell, 1995) and deposits and other financial products (Nakamura 1993). Additional information may also be gathered through other members of the local community, Such as suppliers and customers, who may give specific information about the firm owner or general information about the business environment in which they operate. Importantly, the information gathered over time has significant value beyond the firms' financial statements, Collateral and credit scores. This information helps the relationship lender deal with information opacity better than potential transaction based lenders. However, relationship lending involves the role of agents in gathering information and this could add extra costs to the banks. There is still a gap in the empirical literature as to how to determine how relationship lending works and how the organizational structure of the banks aids their ability to deliver. It is also necessary to determine how recent changes in the economic environment are likely to affect the availability of credit to small businesses.

### **2.3.4 Credit Risk Monitoring and Control**

Monitoring is the last step in the credit risk management process. Effective risk management requires reporting and reviewing the structure to ensure that risks are effectively identified assessed and appropriate controls and responses are in place. After the loan is approved, the loan should be continuously watched over. These include keeping track of borrowers' compliance with credit terms, identifying early signs of irregularity, conducting periodic valuation of collateral and monitoring timely repayments.

Commercial banks need to regularly monitor the status of borrowers and re-evaluate individual credits and commitments, and their ratings. Reliance on unreviewed credits can lead to a serious undetected deterioration of the credit portfolio. Accordingly, the credit risk management programme of each institution must include procedures governing the regular formal review and, where applicable. Because of their frequent contact with borrowers, Credit officers are in a position to detect changes in a borrower's operations or financial condition. This permits these officers to identify potential problems before they may be discovered by independent credit reviewers. Accordingly, credit review systems must ensure that a credit officer is monitoring credit quality and, where applicable.. The objective of effective credit review systems include: ensuring that the institution is aware of borrowers current financial condition; ensuring that collateral security is adequate and enforceable relative to borrowers' current circumstances; ensuring that credits are in compliance with their covenants and margins; providing early identification and classification of potential problem credits; and providing current information regarding the quality of the loan portfolio.

## 2.4 Empirical Evidence

Stiglitz and Weis (1981) observes that small and medium scale firms with opportunities to invest in positive net present value projects may be blocked from doing so because of adverse selection and moral hazard problems. Adverse selection problems arise when potential providers of external finance cannot readily verify whether the firms have access to quality projects. Moral hazard problems are associated with the possibility of SMEs diverting funds made available to them to fund alternative projects or develop the propensity to take excessive risks due to some pervasive incentive structure in the system.

Financing the small and medium Enterprises in Africa is considered risky and as a result they are charged highly on loans. An average of 1.97% of the loan value for small firms and 1.79% for medium sized firms are generally twice as high in developing countries in terms of fee payment. Small and medium Enterprises loans in the Africa appear riskier than those in developed countries. This may be due to the high interest rates observed in Africa, thus the share of non-performing loans among small firm loans in Africa averages 14.5 percent compared to 5.5 percent in developed countries. The non-performing loans ratio for medium sized firms is also higher in Africa (6.8%) than in other countries (5.1%) (Beck et al 2008)

Berger and Udell (2001) further note that shocks to the economic environment in which both banks and SMEs exist can significantly affect the willingness and capability of banks to lend to small and medium scale firms. These shocks come in a variety of forms such as technological innovation, regulatory regime shifts, and shifts in competitive conditions and changes in the macroeconomic environment. Financial institutions respond to these shocks in a number of ways, one of which is to develop stringent lending rules that not only avail

them of full information about the firm and the owner, but also ensure that their investment in such firms are guaranteed in both the short and the long-run.

Ogujiuba et al (2004) established that access to credit market for small and medium scale businesses in Nigeria was limited to macroeconomic instability and uncertainty in the business environment which had forced banks to lend short to SMEs and overdrafts and short term loans are made available at very high interest rates. They also found out that they are also heavily collateralised. The implication of the study established is that many SMEs do not have access to bank loans.

Local studies done by the Financial sector Deepening in Kenya (2008) with the objective of establishing whether lenders in Kenya used the Credit scoring rule to evaluate credit worthiness of employees before give them loans found out that most lenders used their own internal models to develop scorecards from their data. The research found out that the main reason why lenders relied on internal ratings was because there was no credit reference bureau (CRB) that was licensed at that time the research was conducted.

In a related study in Kenya by Ongweso (2006), found out that loan losses were attributed to ineffective credit risk management approaches adopted by the financial institution and therefore there exist a relationship between credit risk management practices and firm performances.

Oketch (1995) studied the demand and supply of SMEs finance in Kenya and established that the size of loans to various borrowers depends on the lending methodology where when funds are lent to individuals, appraisal depended on business assessment, collateral. Business needs and replacement capacity, type of business and availability of funds. For group based loans it depended on age of the group appraisal of the project, past payment records, demand by clients and availability of funds. Oketch used SMEs financiers and did not consider the influence of rationing on SMEs operations. Rukwaro (2000) took the

perspective of both the SMEs and indeed concluded that credit rationing impacts negatively on the operations of the SMEs.

According to a study conducted by FinAcces (2007), found out that, Kenya's financial sector is the most advanced in East Africa, but only an estimated 55% to 60% of the population had ever accessed to financial services. The study also found that the key issue for access to financial services is income, driven by three determinants which were being able to afford the minimum balance and costs for a bank account, being able to afford bus fare to the bank, and finally having sufficient 'excess' cash to justify having a bank account. The commercial banks have used these criteria to categorize their customer as either being creditworthy or uncreditworthy.

## **2.5. Conclusion of the Literature**

Credit risk management is a structured approach to managing uncertainties through risk assessment, developing strategies to manage it and mitigation of risk using managerial resources. The strategies include transferring to another party, avoiding the risk, reducing the negative effects of the risk and accepting some or all of the consequences of a particular risk. Lending has been and is still the mainstay of financial institutions and this is more to emerging economies of developing countries where capital markets are not well developed. To most of the transition economies, lending activities has been a controversial and difficult matter, this is because SMEs on one hand are complaining about lack of credit and excessively high standards set by financial institutions. While on the other hand financial institutions have suffered large loan losses on bad loans. It has been found that in order to minimize loan losses thus credit risk, it is essential for financial institutions to have effective credit risk management systems in place.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

The chapter outlines the research design and methodology that was followed in conducting this study. It will describe 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 an explanatory design since the research design. The design enabled the researcher to explain the relationship between credit risk management practices on SMEs and the level of non-performing loans by Commercial banks in Kenya.

### **3.3. Study Population and Sample**

A census survey was conducted involving all the 43 Commercial banks in Kenya licensed under the banking act as March 2011 as per the central Bank of Kenya.

### **3.4 Data Collection Instruments and Procedure**

The study was facilitated by the use of Primary data and secondary data. Primary data was collected using a structured and unstructured questionnaire (Appendix 2) to elicit a wide range of baseline information about credit risk management practices. The Target respondents were the credit managers and credit officers from various Commercial banks. The questionnaire was divided into three parts. Part A aimed at gathering background information about the Commercial bank, PART B aimed at getting the response of banks involvement in SMEs PART C focused on the main credit risk management practices adopted by these commercial banks on evaluating SMEs.

Secondary data was collected from the financial statements of the Commercial banks to get information on the level non performing loans.



### 3.5 Data Analysis

The study sought to investigate the credit risk management techniques used by commercial banks in Kenya in evaluating SMEs and their relationship to non performing loans. Qualitative and Quantitative techniques were used in analysing the data. Raw data collected from the field was sorted and summarised in tables and diagrams. The process of data analysis involved several stages. Completed questionnaires were edited for completeness and consistency. The data was then coded and checked for any errors and omissions. The collected data was then analysed and results presented in the form of tables, percentages and graphs to analyze the data. Descriptive statistics such as means, standard deviation were also used. The data will be analyzed using Excel and SPSS).Content analysis will also be used in the analysis of some of the open-ended questions.

Correlation analysis was used to determine the relationship between the variables. Non - performing loans of the banks was the dependent variable while the credit risk management practices comprising of credit risk identification, credit risk analysis and assessment, credit Risk mitigation and credit risk monitoring were the independent variables.

Non Performing loan ratio is a ratio of Non Performing loans/Total Number of Outstanding loan Portfolio.

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Model used .

$$\text{SME Non performing loans} = f(x_1 + x_2 + x_3)$$

$$\text{Thus SME NPL} = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + e$$

Non Performing loan ratio is a ratio of Non Performing loans/Total Number of Outstanding loan Portfolio.

X1 is credit risk identification

x2 is Credit risk analysis

x3 is Credit risk mitigation

x4 is Credit risk monitoring

e is the error term

## CHAPTER FOUR

### 4.0 DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The data was gathered exclusively from the questionnaire as the research instrument. The questionnaire was designed in line with the objectives of the study. The data has been presented I qualitative form, followed by analysis and discussions of the data results.

#### 4.2 General Information

##### 4.2.1 Response Rate

The study targeted 43 respondents in collecting data. 32 out of the 43 target respondents, completed and returned the questionnaire contributing to 74.41 % response rate.

##### 4.2.2. Incorporation of the Banks

The study sought to establish where the bank was incorporated. The results outlined in Figure 4.1 below reveal that Of the 90.625 % of the banks that participated in the study were locally incorporated while the other 9.325 % were incorporated in other countries.

This indicates that majority of the respondents are banks that were incorporated locally.

**Table 4.1 Incorporation of the bank**

	Frequency	Percentage
Foreign	29	90.625%
Local	3	9.325%

Total	32	100%
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#### 4.2.3. Nature of Operation of the Banks

In this section 50 % of the banks surveyed served only the local market while 34.375% of the banks surveyed served the both the local and regional neighbouring countries and the rest 15.625 % served different markets all over the world.

**Table 4.2 Nature of Operation of the Bank**

	Frequency	Percentage
Local	16	50%
Regional	11	34.375%
Multinational	5	15.625%
<b>Total</b>	<b>32</b>	<b>100%</b>

#### 4.2.4 Period of Existence

Period of Existence out of the 32 responses showed that 1 bank had been in existence for a period of less than five years but more than one year another bank had been in existence for a period of 6 to 10 years. The rest 30 banks surveyed have been in existence for a period of over 10 years.

**Table 4.3. Period of Existence**

Less than One Year	Frequency	Percentage
Over 10 Years	30	93.75%

1-5 Years	1	3.125%
6-10 Years	1	3.125%

#### 4.2.5 Position of the Respondent

The target respondents were Officers of the banks who worked in the credit department, Credit Officers who participated in the survey formed 81.25% of the total target while Credit Managers were 18.75% of the response rate.

**Table 4.4: Position of the Respondent**

Position of the respondent	Frequency	Percentage
Credit Officers	26	81.25%
Credit Managers	6	18.75%
Total	32	

#### 4.3. SME Lending History

##### 4.3.1 Concentration of SME clients

Data presented showed that majority of SME clients are located in the urban and peri-urban areas, with a concentration of 87.5% while SME clients in the rural area make up 12.5% of the clients. This means that most SMEs in the rural don't have access to formal banking.

**Table 4.5. Concentration of SME clients**

Concentration	Frequency	Percentage
Urban	28	87.5%

Rural	4	12.5%
	32	100

#### 4.3.3 Trend in terms of growth rate of SMEs accounts

All the banks surveyed agreed that the growth rate in the number of SMEs account was on the increase the main reason for this was because of the rapid competition that has now forced banks to look for other markets in the SME sector.

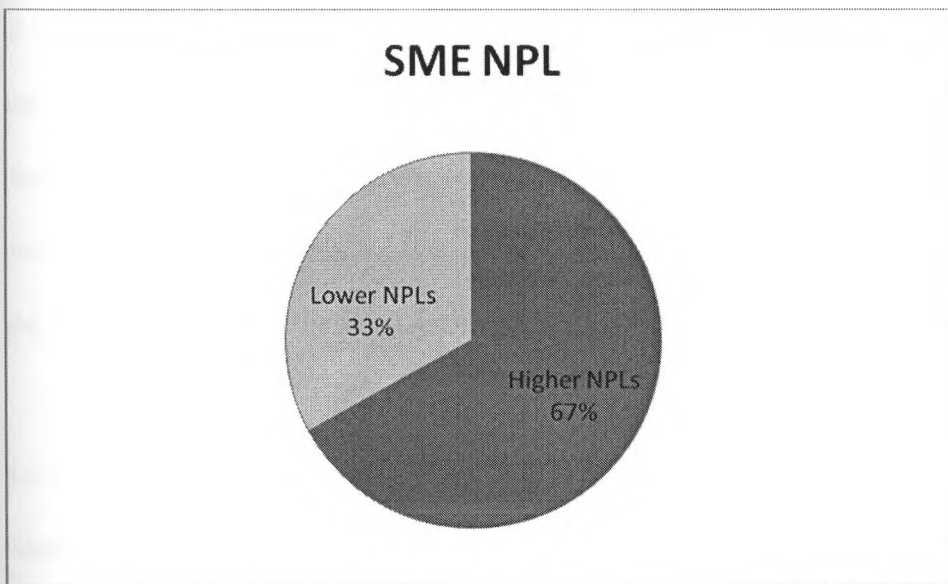
**Table 4.6 Growth trends of SME accounts**

	Frequency	Percent
Decrease	32	100%
Increase	0	0%

#### 4.3.4 How the growing Trend in SME accounts has affected the Level of non-performing loans in the banks?

67% of the banks surveyed stated that the growth rate in the number of SME accounts contributed to number of delinquent accounts in their loan books, the main reason is due to vulnerability of SME to shocks in the economy as Inflation and Political risks. The other 33% stated that the growth rate in the number of SMEs did not affect the trend of delinquent loans on an increasing trend.

**Fig 4.1 Growth rate Trend of SME accounts on the level of NPLs**



**4.4 Credit Risk Management Techniques used for evaluating SMEs Loans**

**4.4.1 Credit Risk Identification for SMEs**

**Table 4.7 Method used by banks for Credit Risk Identification**

	Mean	Std Dev
Visiting clients premises	3.81	0.36
Credit Scoring mechanism	3.71	0.217
Credit Referencing Bureau	3.59	0.74
Audited Financial statements	3.125	0.25



Study Findings showed that, the most important source of information when evaluating credit worthiness of SMEs was visiting SMEs business/premise which was represented by a mean of 3.81, this is important for the Credit officer to verify the physical residence of trading and gather any information that may assist in Credit risk identification. This was followed by use of credit scoring to assign a credit score to the SME clients this was shown by a mean rate of 3.71. The use of credit referencing bureaus is gaining momentum in the Kenyan banking system this is indicated by a mean of 3.59. Audited Financial statements method was the least method that was used in credit risk identification this was because most of the SME did not proper records concerning their businesses. Banks that used this method for SMEs, used it on SMEs with transparent transactions, long histories and were audited annually by a Certified Public Accountant.

#### **4.4.2 Characteristics considered when evaluating the credit worthiness of SMEs clients**

The study went further to establish the various characteristics considered when assessing an applicant before availing credit. Data in this section was analyzed using a likert scale. Results presented in table 4.8 shows that the most important characteristic considered when evaluating an SME applicant was the capacity of the SME to repay the loan with a high mean of 3.93 followed by the character of the borrower shown by a mean of 3.65 .Amount of outstanding debt was shown by a mean of 3.84 and length of lending history show by a mean of 3.21 and Inspecting late payments was the least characteristic considered when evaluating an applicant before availing credit for SMEs.

#### **Table 4.8 Characteristics considered when evaluating the credit worthiness of SMEs clients**

	Mean	Std Dev
Capacity to pay	3.93	0.44
Amount of Outstanding debt	3.84	0.81
The Character and Reputation	3.65	0.44
Length of credit history	3.21	0.50
Inspecting late payments	2.84	0.71

#### 4.4.3 Credit risk mitigation techniques of managing loan losses does your institution use on SMEs

Risk Based pricing is most used technique by Commercial banks in Kenya in credit risk mitigation. This was shown by the high interest rates that were charged on SME credit applicants to compensate for high risk that involved lending to SME clients. This was closely followed by use of Collateral where the study findings showed that majority of SMEs business loans were heavily collateralized. Others required that the SME to have a saving history with the bank to enable the bank monitor the business cash flows.

The use of the a personal guarantor was used in instances where the Collateral pledged by the SME client was not sufficient and the guarantor had to guarantee part of the loan.

**Table 4.9 Credit Risk Mitigation**

	Mean	Std Dev
Risk based pricing	3.93	0.32
Collateralization	3.78	0.88
Deposit/Savings account	3.37	0.44
Personal Guarantor	3.0	0.74

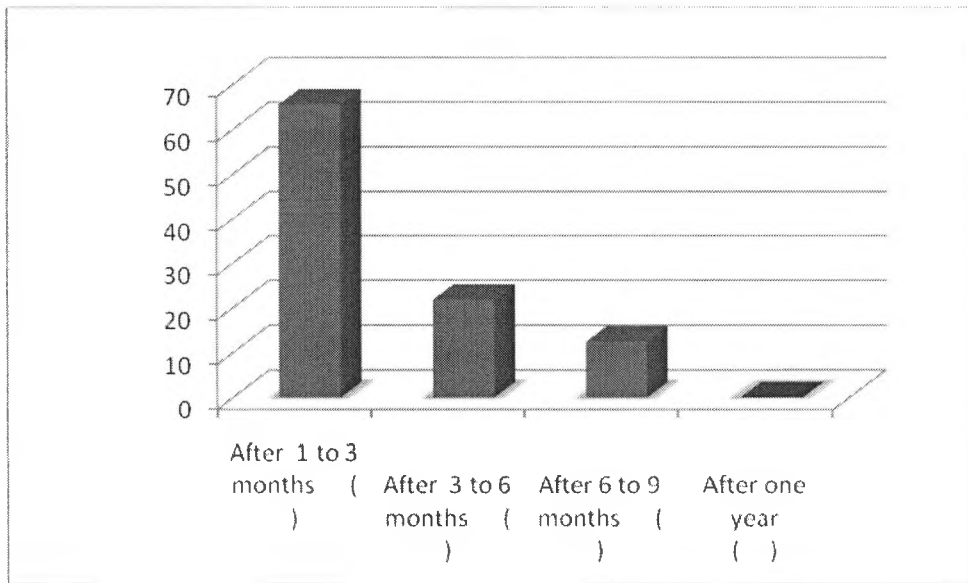
Insuarance	2.81	0.50
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Banks that used guarantors for SMEs , accepted guarantors who were only account holders and had certain percentage of money in their accounts which would be used to guarantee the loan for the period of the loan.

Collateral that was used as security for the loan for SMEs included Motor Vehicle log book, Land title deeds, Immovable Assets and Chattels.

#### 4.4.4 Credit Risk Monitoring

Fig 4.2 Distribution of Credit Reminders

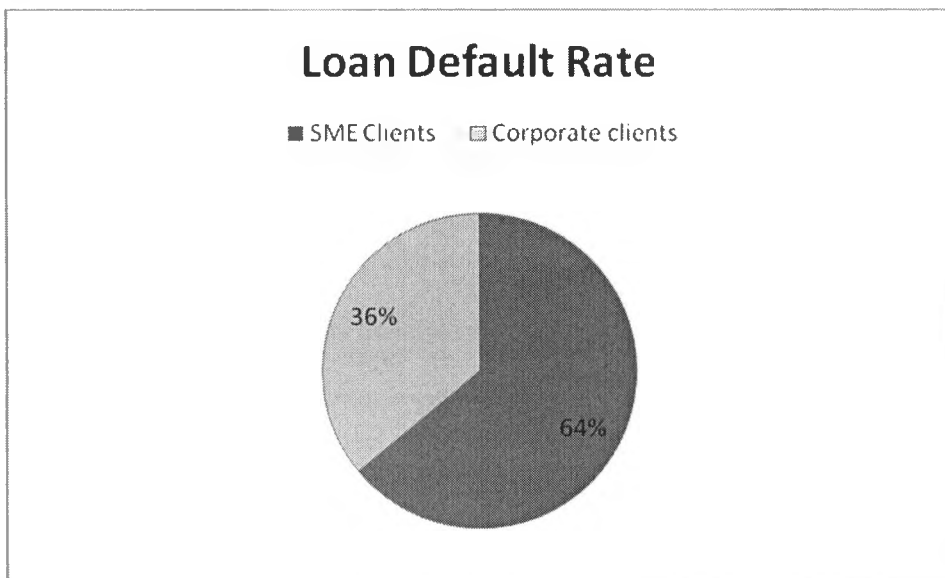


Credit reminders are part of the credit monitoring process. Of the 32 respondents 27 acknowledged their institutions provide credit reminders within 1 to 3 months. 5 stated their institutitons provide credit reminders after 3 to 6 months.

#### 4.4.7 Rate of loan default for SMEs compared to the Large Companies

Study findings found out that 64% of respondents indicated that the rate of loan default was higher among their SME clients, this was mostly the case for banks that capitalized on giving credit facilities to SMEs, compared to 36% of the respondents who indicated that the rate of default was higher among the other clients.

Figure 4.3 Rate of loan default for SMEs compared to the Corporate Clients



## 4.5 Non Performing Loans Analysis

Table 5.0 Asset Quality and Provisions

Year	2005	2006	2007	2008	2009	2010
Net Assets	636,900	755,300	951,232	1,183,654	1,353,499	1,678,112
Gross Loans	415,300	473,100	533,796	670,372	757,760	914,910
Net Loans	377,400	437,900	518,920	656,678	721,615	876,357
Gross Non-performing loans	106,500	100,700	56,775	61,869	60,741	57,637
Interest in Suspense	37,900	35,300	14,876	13,694	9,839	9,908
Total Non-Performing Loans	68,600	65,300	41,899	48,175	50,902	47,730
Specific Provisions	39,000	41,700	23,503	25,519	26,306	28,645
Net Non-Performing Loans	29,600	23,600	18,395	22,655	24,596	19,084
Gross Loans/ Net Assets	65.20%	62.60%	56.12%	56.64%	56.00%	54.50%
Gross NPLs/ Gross Loans	25.70%	21.30%	10.64%	9.23%	8.00%	6.30%
Net NPLs/ Gross Loans	7.10%	5.00%	3.45%	3.38%	3.20%	3.20%

(Source CBK)

From the Non-performing data obtained from audited financial accounts of Commercial banks in Kenya, the trend of non-performing loans was declining from Ksh 68,600 Million in the year 2005 to Ksh 65,300 Million in the year 2006 to Ksh 41,899 Million, In the year 2008 and 2009 there was an increase in non-performing loans to Ksh 48,175 Million and Ksh 50,902 Million respectively this was after the post election violence in Kenya that affected the macro-economic stability for businesses and hence an increase in non-performing loans.

The overall value of Net Nonperforming loans over Gross Non performing has been declining over the years, this is as a result of improved credit risk management practices and economic growth in the country.

## 4.6 Regression Analysis

A regression equation was used to determine the relationship where

The Predictor variables are Credit risk Identification, Credit risk analysis, Credit risk mitigation and Credit risk monitoring

SME Non performing loans is the independent variable.

Table5.1

Model	Unstandardized Coefficients		Standardized Coefficient	T	Sig
	B	Std Error	Beta		
Constant	0.741	0.428		4.970	0.011
Credit risk Identification,	-0.361	0.357	-0.91	-2.459	0.036
Credit risk analysis,	-0.245	0.981	-0.19	-0.76	0.126
Credit risk mitigation	-0.164	0.234	-.183	-1.524	0.23
Credit risk monitoring	-0.232	0.063	-.223	-2.341	0.018

**The equation is**

$$Y=0.741-0.361x_1-0.245x_2-0.164x_3-0.232x_4$$

From the regression equation it was established that holding Credit risk Identification, Credit risk analysis, Credit risk mitigation Credit risk monitoring at a constant non performing loans would stand at 0.741.

A unit increase in credit risk identification would lead to a decrease in the level of nonperforming loans by 0.361

A unit increase in credit risk analysis would lead to a decrease in the level of nonperforming loans by 0.245

A unit increase in credit risk mitigation would lead to a decrease in the level of nonperforming loans by 0.164

A unit increase in credit risk monitoring would lead to a decrease in the level of nonperforming loans by 0.232

## **CHAPTER FIVE**

### **5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

From the analysis and data collected, the following discussions, conclusions and recommendations were made. The responses were based on the objectives of the study.

#### **5.2 Summary and Conclusions**

This study offers insights into the lending practices of Kenyan banks towards the small and medium enterprises (SMEs) in Kenya. The results were based on the analysis of responses of Credit managers and Credit Officers of 32 commercial banks that provide SMEs with credit facilities. Findings reveal that the number of SME accounts in Kenyan Banks is on an upward trend; this is as a result of increased competition in the industry that has forced banks to look for new markets in the SME market. With the increase in the number of SME accounts, findings also show that the volume of loans disbursed by commercial banks in Kenya have also been increasing. Majority of the SME accounts are mostly concentrated in the urban and peri-urban areas that means that most of the SMEs in the rural areas still do not have access to Formal credit facilities.

Lack of access to finance is ranked one of the top obstacles to SME growth. This is rooted on the information asymmetry problem facing both lenders and SME borrowers. The production of quality credit information will help close the information gap. Commercial banks in Kenya use different credit risk management tools to ensure that techniques and assessment models manage their credit risk which have one main objective of reducing the

amount of loan default which is a principal cause of bank failure. Sound credit risk management policies have lower loan default ratios (bad loans).

The Study Concludes that Commercial banks in Kenya used a combination of methods to identify credit risk among SMEs this includes Visiting Clients premises, Using Credit Scoring mechanism, Using information from the Credit reference Bureaus and also using Audited financial statements .Visiting the Clients Premises was the most commonly used method by Commercial banks in Kenya to Identify Credit risk among SMEs which have a mean response rate of 3.81,this was mainly used to verify physical address of the business and identify potential sources of credit risk for the SME customers, this was followed closely by the use of credit scoring mechanism.

With the introduction of the Credit Reference Bureau regulations (2008)(CRB) banks have quickly adopted the policy and are using licensed credit referencing bureau to identify credit risk among the SME credit applicants. Credit information sharing through the credit reference bureaus will enable borrowers build a track record that can be used in accessing credit and thus bridge the information gap that exists between the Lenders and the SMEs. This will be especially pertinent to those borrowers in the informal and small and Medium Enterprises (SMEs) who have a track record and good performance to use it to access credit. Audited Financial Statements was the least popular method used in Risk Identification for SMEs this is because most SME do not have proper records concerning their businesses. Banks that used this method for SMEs used them on SMEs with transparent transactions, long histories and were audited annually by a Certified Public Accountant..

Despite the importance of SME to economic growth and creating employment opportunities SMEs operate in very risky environment thus Commercial banks in Kenya



have responded with very rigid terms and conditions to prevent/avoid instances of nonperforming loans .This is shown by the high interest rate that is charged to clients in this category compared banks lending to the large corporate clients. The high interest rates is as a result of Information asymmetry between the lender and the SME, Moral Hazard, high transaction costs and insufficient Collaterals and guarantees. Credit facilities to SMEs are heavily secured with Physical Collateral as Land Title deeds, Motor Vehicle Log books, Business Equipments, Chattels and personal gurantors. Borrowers without access to such collateral have been constrained in accessing credit. This findings confirm previous case studies done ( Beck et al ,World bank (2008)), On the high interest rates charged on SME clients in developing countries compared to SMEs in developed countries.

Commercial banks in Kenya also require that the SME to have operated a Deposits/Savings accounts for a period of six to twelve months before availing credit facilities to them. This is an effective tool for monitoring the cash flow of the business.Personal guarantors are used in SME lending when the collateral pledged is not enough to cover the security, in most banks the guarantor is an account holder with the lender .

Findings also show that the amount of credit disbursed by commercial banks in Kenya has been increasing from Ksh 415,000 in the 2005 to KSh 914,910 in the year 2010 , Consequently the amount of non-performing loans has declining apart from the year 2008 and 2009 where there was an increase in non-performing loans to Ksh 48,175 Million and Ksh 50,902 Million respectively this was after the post election violence in Kenya that affected the macro-economic stability for businesses and hence an increase in non-performing loans.

The analysis found a negative relationship between nonperforming loans and the credit risk management variables used in the study.

### **5.3 Policy Recommendations**

The Kenyan market is currently experiencing an improvement in information sharing following the implementation of credit reference bureaus. This will over time reduce information asymmetries that exist in the market today for the SME clients. However banks must respond to this by combining this information with different credit risk management techniques used to evaluate SMEs by reviewing the lending terms and conditions of SMEs.

The government can also provide special support units which includes impacting appropriate business skill through workshops, expert advisers and enterprises forums to SMEs clients , this will help the equip the business with appropriate business management skills for future challenges and reduce instances of nonperforming loans.

### **5.4 Limitations and Assumptions of the Study**

The study focussed on a few variables of the SME sector that contribute to non performing loans, more variables like information asymmetry, moral hazard of SME lending, loan interest rate, and appropriate business skills.

The study focussed on Commercial banks lending to SMEs whose findings may not be generalised to cover all financial institutions that lend to SMEs.

Due to time constraints there was a limitation on the data collection method as the questionnaires were dropped and picked, as opposed to conducting an interview which could have gathered more information.

### **5.5 Suggestions for Further Study**

The study suggests a study should be undertaken to investigate the effect of the Credit referencing bureau in Kenya on the Access of Credit Facilities on the Small and Medium Enterprises.

Further analysis should also be carried out to find out the credit risk management strategies that microfinance institutions and Sacco's use to evaluate the SMEs .

## REFERENCES

- Abedi C. (2000) *Sources of Finance Available to Small Scale Enterprises in Nairobi*. Unpublished MBA Thesis, Kenyatta University
- Alice Kombo, Wesonga Justus, Noah Murumba, Makworo Edwin (2011) *An Evaluation of the Impact of Risk Management Strategies on Micro-Finance Institutions' Financial Sustainability: A Case of Selected Micro Finance Institutions in Kisii Municipality, Kenya*. Educational Research, Vol. 2(5) pp. 1149-1153.
- Baydas Committee (1999) *Banking Supervision of Micro finance institutions: experiences from Latin America, Asia and Africa*, Occasional paper 1 Washington D.C : Micro Finance network. Bulletin October 2003.
- Berger, A.N and G.F. Udell (2001). *Small Business Credit Availability and Relationship Lending: The Importance of Bank Organizational Structure*. Federal Reserve Board Working Paper, Washington D.C.
- Bester, H. (1994). *The role of collateral in a model of debt renegotiation*", *Journal of Money, Credit and Banking*. Vol. 26 No. 1, pp. 72-86.
- Bierman, C.2005. *Black Economic Empowerment and Cash for Small and Medium Sized Business*. Houghton: Colorpress.
- Brown Bridge (1998) *Financial distress in local banks in Kenya, Uganda and Zambia: Causes and Implications for regulatory policy*", *Development policy Review Journal*, Vol. 16 No2 PP 173-89.
- Basel (2010) *"Principles of management of credit risk"* Consultative paper issued by the Basel committee on banking supervision, Basel (April 2010).
- Beck T, Demirguc-Kunt, A, Peris, M, S, (2008) *Bank Financing for Small and Medium Enterprises around the world: Drivers, obstacles. Business models and lending practices*, World bank Policy Research Working paper 4785

Buckley, J., 1997. *International technology transfer by small and medium-sized enterprises*. Small Business Economics, 9, 67-78.

CBK (2006,2007,2008,2009,2010). *Annual bank Supervision Reports*.

Derban, W.K., Binner, J.M., & Mullineux, A. (2005). *Loan repayment performance in community development finance institutions in the UK*. Small Business Economics, 25, 319-332.

Djankov S, Mcleish and Shleifer A, (2005) “ *Private Credit in 129 Countries*,” NBER Working paper 11078 (Cambridge, Massachusetts: National Bureau for Economic Research).

Edelshain, D. (2005), *British Corporate Currency exposure and foreign exchange risk management*, London Business School, London PHD thesis

Feldman, R., (1997). *Banks and a Big Change In Technology Called Credit Scoring*. The Region Federal Reserve Bank of Minneapolis, September 19-25.

Financial Sector Deepening Kenya (2008) -*The potential for credit scoring for SMEs lending in Kenya*.

Fun Ho Soke Catherine & Yusoff Izza Nurul (2009). *A Preliminary Study on Credit Risk Management Strategies of Selected Financial Institutions in Malaysia*. Journal of Banking Vol 28 Number 45-65.

Greuning, H. and Bratanovic, S.B. (2003), *Analyzing and Managing Banking Risk: A Framework for Assessing Corporate Governance and Financial Risk*, 2nd ed., The World Bank, Washington, DC.

GTZ, January (2000) .*Liquidity Management: A Tool Kit for Microfinance Institutions*, published by GTZ.

- Guimon Jose (2005). Intellectual capital reporting and credit risk analysis. Journal of Intellectual Capital Vol. 6 No. 1, pp. 28-42 Emerald Group Publishing Limited.
- Kimeu T.K (2006) A Survey of Credit Risk Management techniques of unsecured Bank Loans of Commercial banks in Kenya. Unpublished MBA Research project UON.
- Koch, T.W. and MacDonald, S.S. (2000), Bank Management, The Dryden Press/Harcourt College Publishers, Hinsdale, IL/Orlando, FL.
- Migiro, S.O. & Wallis, M. 2006. Relating Kenyan manufacturing SMEs finance need to information on alternative sources of finance. South African Journal of Information Management, 8(1), 1-12
- Nakanura, L.I. (1993). Commercial Bank Information Implications for The Structure of Banking in M. Klausner and L.J. White Eds. Structural Change In Banking, Isomer Wood; Ltd, Irowin Vol. 3 pp. 136.
- Oketch, O. Henry, Abaga, A. and Kulundu, D .(1995). *Demand and Supply of SME finance in Kenya. K-Rep. Nairobi.*
- Ogujiuba, K. K, Ohuche, F. K2,Adenuga, A. (2004)*Credit Availability to Small and Medium Scale Enterprises in Nigeria.*
- Rukwaro M.W. (2000) *Credit Operations by Micro Finance Institutions and its Influence on the Operations of the SMEs.* Unpublished MBA project ,University of Nairobi.
- Sinkey J Fr.(1992) *Financial Institutions Management :A modern Perspective .Third Edition :Published by McGraw Hill.*
- Stiglitz, J. and A. Weiss, (1981). *Credit Rationing in Markets with Imperfect Information.* American Economic Review 71, 93-40.
- Thelma Kroukamp (2009).*Facilitating banking finance access for BBBEE firms in the Southern Cape area.* Published MBA project NMMU Business School.

## APPENDICES

### APPENDIX A: List of Commercial banks in Kenya

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

(Source, CBK as at March 2011 )

**APPENDIX B : QUESTIONNAIRE**

**PART A : General Information**

1. Name of the Commercial bank.....
2. Where Registered/incorporated.....  
Local (Kenyan) ( ) Foreign(Outside Kenya) ( ) Other
3. Nature of Operation  
A.) Regional ( ) c) Multinational ( )  
b) Local ( ) d) Other ( )
4. How long has the bank being in Operation in Kenya  
a) Less than 1 year ( ) c) Between 6 and 10 years( )  
b) Between 1 and 5 years( ) d) Over 10 years ( )
5. Please indicate your rank in the bank.....

**PART B :SME Lending history**

1. Where are the SMEs Clients more concentrated?  
Rural ( ) Urban ( )
2. What has been the trend in terms of growth rate in terms of SMEs accounts in the recent past?  
(a) Increasing ( ) b) Decreasing ( )
3. Has the above trend affected the the Level of nonperforming loans in the banks?  
a)Yes ( ) b) No ( )

If yes how has it affected the level of nonperforming loans

.....

**PART C: Credit Risk Management Tools used on for Small Medium Enterprises**

1. Which Credit Risk identification technique (s) does your bank use identifying risk for the SME ?

	Not at All	Least	Moderate	Most
Credit Referencing Bureau				
Visiting clients premises				
Audited Financial statements				
Credit Scoring mechanism				

2. Which of the following most accurately describes your loan assessment method for SMEs?



a) Statistical ( )

b) Relationship ( )

Based on the answer above, what is the reason behind the method of choice?

.....

3. Kindly select the credit criteria (s) your institution adopts to test credit worthiness of your SMEs clients

	<b>Not at All</b>	<b>Least</b>	<b>Moderately</b>	<b>Most</b>
The Character and Reputation				
Amount of Outstanding debt				
Capacity to Repay				
Length of credit history				
Inspecting late payments				

4. Which of the following credit risk mitigation techniques of managing loan losses does your institution use on SMEs

	<b>Not at All</b>	<b>Least</b>	<b>Moderately</b>	<b>Most</b>	<b>Not at All</b>
Collateralization					
Personal Guarantor					
Risk based pricing					
Deposit/Savings account					
Insurance					

If Guarantor, what kind of personal guarantors does your bank require before lending to SMEs

.....

If Collateral, What kind of Collateral is required as security for the SME loans given

.....

5. Credit reminders are part of the credit monitoring procedures. How often does your institution provide credit reminders to your SMEs Clients

- After 1 to 3 months ( )
- After 3 to 6 months ( )
- After 6 to 9 months ( )
- After one year ( )

6. Is the rate of loan default higher for SMEs than for the Corporate Clients

- a) Yes ( )    b) No ( )

If Yes what is the reason behind it?

.....

7. How does this impact the interest rate pricing for SMEs relative to the corporate clients?

- a) Increases the rate ( )    b) Decreases the rate ( )

**Thank you for taking your time to complete the questionnaire**