A STUDY OF THE RELATIONSHIP BETWEEN CREDIT RISK MANAGEMENT AND NON-PERFORMING LOANS: THE CASE OF COMMERCIAL BANKS IN KENYA

BY

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DECLARATION

This research project is my original work and has not been submitted for a degree in this or any other University.

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This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

TO MY PARENTS

AND

TO MY SIBLINGS

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I would like to thank God who made it possible.

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ABSTRACT

This study examined the relationship between credit risk management and non performing loans in the financial sector in Kenya. The population of the study included all the 45 commercial banks in Kenya based/headquartered in Nairobi. Primary data was collected by use of questionnaires. Out of the targeted 45 respondents 37 responded thus a respondent rate of 82.2%, a confidence level sufficient enough to make conclusions on the objective of the study.

The data was analyzed using descriptive and inferential statistics. The research found that in the Kenyan set up a combination of intensive credit risk management by the banks coupled with close supervision by the central bank has greatly enhanced the decline of nonperforming loans ratio in the banking sector yearly. Analyzing the asset quality of the financial sector for the past six years, the ratio of gross nonperforming loans to gross loans has declined from a high of 35% in 2003 to a low of 9.23% in 2008. The decline of this ratio confirms the close relationship between nonperforming loans and credit risk management as the reasons behind this decline has been explained as being mainly due to enhanced corporate governance and risk management as well as credit underwriting standards by the banks coupled with CBK strict supervision.

On the credit risk techniques, the research found that credit limits, diversification of credit portfolio, BIS requirements, credit insurance, securitization and credit scoring are used by all the banks studied. Loan scoring was found to be unpopular as a credit risk tool with only 48.65% of the banks using the same. In addition to that, pricing and loan syndication are also not used by all the banks in Kenya.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

The overall aim of a credit analyst is to reach a judgment about extending credit to a customer using information that is relevant to the principles of good credit management. These principles have been summarized into a mnemonic, Campari and Ice (Coyle, 2000). While financial institutions have faced difficulties over the years for a multitude of reasons, the major cause of serious banking problems continues to be directly related to lax credit standards for borrowers and counterparties, poor portfolio risk management, or a lack of attention to changes in economic or other circumstances that can lead to a deterioration in the credit standing of a bank's counterparties. This experience is common in both G-10 and non-G-10 countries (Basel, 2000).

Risk is central to the banking business and can be defined as the chance or possibility of danger, loss, or injury (Parry, 1997). While this study will primarily concern itself with credit risk, it is worth noting that financial institutions are faced with a variety of risks which they must identify, measure and manage. These include but are not limited to operational risk, legal or documentary risk, liquidity risk, hedging risk, sovereign risk, credit risk, market risk, delivery risk, position risk, and provisional risk (Banks, 1993)

While risk has affected many of the institutions active in today's markets, regulators have also been required to make changes to enforce oversight of products and institutions in their respective areas (Banks, 1993).

The world over, credit risk has proved to be the most critical of all risks faced by a banking institution. A study of bank failures in New England found that, of 62 banks in existence before 1984, which failed from 1989 to 1992, in 58 cases it was observed that loans and advances were not repaid in time (Sabrani, 2002). Developed economies, such as the United States, Sweden and Japan and developing countries, including much of Latin America and South East Asia, and transitional economies, have had significant crises relating to nonperforming loans. China, an example of an economy that has been in transition, may currently be experiencing the biggest problem of them all (Campbell, 2007). This indicates the role of credit risk management, thus forming the basis of this research. By collecting data from all Banks in Kenya, the study sought to measure the relationship between Credit risk management and nonperforming loans.

Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Banks should also consider the relationships between credit risk and other risks. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization (Basel, 2000).

So far there is no international agreement on the definition of the term nonperforming loans but the Asian Development Bank is of the view that the accepted international standard for classification of loans as nonperforming is 90 days or more overdue. This approach is also

supported by the Bank of Thailand and the Central Bank of Kenya, which state that a nonperforming loan is a loan of which the principal and or interest has not been paid over three months from the due date specified in the contract.

Nonperforming loans can also be defined as loans which for a relatively long period of time do not generate income; that is the principal and/or interest on these loans has been left unpaid for at least 90 days (Caprio and Klingebiel, 1999). The lack of a definition presents problems and it would be helpful if a common approach could be found. For the purpose of this research we shall use the definition given by the Central Bank of Kenya which is the regulator of all Kenyan banks.

There are various factors that cause Loans to move from performing to nonperforming mode. Among these factors are lax credit standards for borrowers and counterparties, poor portfolio risk management, or a lack of attention to changes in economic or other circumstances that can lead to deterioration in the credit standing of a bank's counterparties (Basel, 2000). These factors were found to be common in both G-10 and non-G-10 countries.

The association between nonperforming loans and banking crises was corroborated by the 1997 East Asian financial and banking crisis which left the four countries severely affected, with a more than threefold increase in their volume of nonperforming loans in the period leading up to the crisis. For instance, in Indonesia where over 60 banks collapsed during

the crisis, nonperforming loans represented about 75% of total loan portfolios (Caprio and Klingebiel, 2002). Banking crisis fueled by nonperforming loans are common in developed countries as well. The scope of these loans is generally more important in developing and emerging market economies, however. For instance peak levels of impaired loans averaged 49 percent of total loans in Indonesia, 48 percent in Thailand; while impaired loans have remained consistently below 10 percent in Nordic and most industrial countries, including during the period of banking and financial crises (Alexander et al.,1997).

The Central Bank of Kenya (CBK) in their Annual report for the period 2006-2007 corroborated the fact that Credit risk management can be a contributory factor to the increase or decrease in the levels of nonperforming loans. In the CBK report risk management was mentioned as one of the factors that reduced the level of nonperforming loans in the period 2006 to 2007. They added on to say that the nonperforming loans pose no significant credit risk exposure since they ensured that loan facilities were well secured and nonperforming loans had adequate provisions.

This project sought to measure the relationship between Credit risk management and nonperforming loans with a focus on the various types of credit risk management instruments adopted by the Kenyan commercial banks. This engulfed a study of all the 45 banks in Kenya to gauge their management of credit risk.

1.2 STATEMENT OF THE PROBLEM

Risk management is a multi phase process of controlling and/or manipulating risk to achieve a desired goal (Parry, 1997). As a requirement by the Central Bank of Kenya all Kenyan commercial banks are required to incorporate in their corporate strategy a good risk management plan that should be followed strictly to the letter. While many researchers have carried out general studies on causes of nonperforming loans and their effects on the worldwide banking crises in Europe, Asia and parts of Africa, there have not been specific studies on the relationship between Credit risk management and Nonperforming loans. Most of the research that has been done in the recent past has been on nonperforming loans and banking crises just to mention a few of these researches we have (Hippolyte, 2005) who did a causal analysis on the Non performing Loans in Sub Saharan Africa and (Mugo, 2001) who researched on the applicability of financial crisis model to bank failures in Kenya. Nonperforming loans have come out to be the cause of various bank failures. None of these researches have been clear on the causes of nonperforming loans. This paper sought to look at the relationship between credit risk management and nonperforming loans with special attention to the types of credit risk management tools used in Kenyan commercial banks and their effect on maintaining a low growth rate on nonperforming loans. This leads us to question how successful credit risk management is in the reduction of nonperforming loans in Kenyan banks.

1.3 OBJECTIVE OF THE STUDY

The study sought to assess the effect of employing different credit risk management techniques on the level of nonperforming loans.

1.4 IMPORTANCE OF THE STUDY

This study will contribute to academia by showing how Credit risk management (CRM) can affect the growth of nonperforming loans in a financial institution. It will add to the body of literature on CRM that has shown the effects of CRM on the management of the lending portfolio of financial institutions. In CRM as in other areas of strategic management managers are often compelled to choose different long term shaping strategies, by reading this study credit managers in financial institutions will have specific literature as to how the various CRM tools employed will influence growth of nonperforming loans in their institutions.

CHAPTER TWO

LITERATURE REVIEW

(Inders and Mueller, 2006 & 2007) came up with two assumptions on informed lending. First, banks do not own the projects that they do invest in hence are unable to extract all the profits that are generated from the said projects. Secondly, banks are sophisticated lenders and conduct credit analysis before advancing new loans. The literature review in this research will focus on the authors who have advanced this theory. This chapter seeks to identify gaps, clarify issues and demonstrate that the research has not embarked on work in an area of interest that has already been studied This project addresses the management of bank credit risk challenges. Banks are required to be aware of the reliable risk measures to direct capital to activities with the best risk/reward ratios. This therefore means that potential losses arising from loan advances must be within the limits acceptable by the creditors, regulators, shareholders, and customers. Bank management is therefore faced with the task of ensuring that the potential losses are sustainable and that the risk/return trade offs are within acceptable levels (Pritsker, 1996).

2.1 REVIEW OF THEORIES

The Basel committee on Banking supervision define Credit risk as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with the agreed terms (Basel, 2000). The CBK in their risk guideline define credit risk as the current or prospective risk to earnings and capital arising from an obligor's failure to meet the terms of any contract with the bank or if an obligor otherwise fails to perform as agreed.

Financial risk is the risk that a company will not be able to repay its debts in full or on time because its debt burden is too big (Coyle, 2000). It can also be defined as the possibility that money lent will not be repaid (Parry, 1997). Credit risk is the potential variation in net income and market value of equity resulting from non payment or delayed payment (MacDonald and Koch, 2006). They also say that different types of assets and off balance sheet items have different default probabilities. Loans typically exhibit the greatest credit risk.

In general, the largest source of credit risk is loans, albeit that credit risk exists throughout the other activities of the bank both on and off the balance sheet. These other activities include acceptances, inter-bank transactions, trade financing, foreign exchange transactions, futures, swaps, options and guarantees. Given the significant size of the loan portfolio in balance sheets of local banks, credit risk remains the largest risk type in the local banking sector. Default risk is the possibility that a borrower will be unable to meet interest and/or principal repayment obligations on a loan agreement. Default risk has a significant effect on the value of a bond: if a borrower's ability to repay debt is impaired, default risk is higher and the value of the bond will decline.

Several concepts have been built to address credit risk and analysis. Banks mainly use portfolio theory in order to reduce the risks on the loans they offer. The idea stems from the fact that a group of assets held together is less risky than the risks of the individual assets

making up the portfolio. The components of credit risk include the probability of a borrower defaulting, expected bank exposure, and expected bank loss given default.

A number of models are used to analyze default correlation of bank loans. For instance Monte Carlo simulation model is used to measure default risk and assess comparative statistics of default correlations. Also by assessing the company's asset values at a given point in time, their variance/covariance matrix and their liability structures (Merton, 1974). Using historical default data to estimate default correlations are also used to gauge default risk.

The principles of portfolio analysis play a great hand in the management of credit risk. As the father of portfolio theory Harry Markowitz and William Sharp found. The effect of concentrating risk has led to banks diversifying their exposure limits across the borrowers and among various types of debt facilities. Capital asset pricing model (CAPM) developed by William Sharp is well applicable in investment decisions. It describes the identification of an investment's return and diversification of risk on the investments at hand.

CAPM MODEL

$r_i - r_f - \beta_i (r_M - r_f)$

Where: $\beta_i = \frac{\sigma_{iM}}{\sigma^2_M}$

r_i is the expected return on asset i

r_f is a risk free rate

β_i is a risk measure of asset i

r_M is the expected market return

Accordingly, a bank can lend money with rate of interest or buy bond The market return r_m, describes the market which contains the asset. Financial institutions can establish limits on the amount of credit to advance to a borrower or industry, diversify the portfolio composition and be able to reduce the risk of credit loss thereby contributing to higher marginal returns.

2.2 RISK MANAGEMENT

Risk management is the process by which managers identify, assess, monitor and control risks associated with a financial institution's activities. These risk types include Credit, liquidity, market, operational, reputation, and legal risk (MacDonald and Koch, 2006)

Risk management can also be defined as a process, a multi phase process of controlling and/or manipulating risk to achieve a desired goal. The process has three steps: identification, assessment and finally management of the risk (Parry, 1997). Identification involves considering the type of risk. Assessment is done to determine overall risk on the lender and finally management which has three methods; not accepting risk, risk transference through syndication and risk retention where a lender considers forms of insurance when lending. Most banks have been found to use the third method.

Risk management is also defined as a multi phase process with five steps which involves identification, measurement, aggregate, planning and management, and finally monitoring the risk. Credit risk is calculated on the basis of possible losses from the credit portfolio, where potential losses in the credit business can be divided into expected losses and unexpected losses (OeNB, 2004). The most commonly used management tools include risk-adjusted pricing of individual loan transactions, setting of risk limits for individual positions or portfolios, use of guarantees, derivatives, and credit insurance, securitization of risks, and buying and selling of assets (OeNB, 2004)

2.3 CREDIT RISK MEASUREMENT AND MANAGEMENT

There are three main approaches to the measurement of Credit Risk, Financial Leverage, interest cover and debt ratio. His justification for his choice is that these three are useful indicators of a company's ability to pay its debts (Coyle, 2000).

Financial Leverage is the ratio of "prior charge capital" relative to the size of equity capital or relative to the size of total capital. Prior charge capital is the balance sheet value of all longer term capital that has prior claim on profits ahead of equity shareholders. It consists of items under the heading Creditors and is due after one year e.g. Bank loans and shorter term loans which may be renewed or negotiated to a longer period. Equity is the common stock in issue plus balance sheet reserves. A company is said to be highly leveraged when the leverage ratio rises above 100%. Trends of this ratio over time can be a good indicator of improving or deteriorating credit risk (Coyle, 2000).

Interest Cover is a measure of financial risk that shows risk in terms of profit rather than capital values. It measures a company's ability to meet its interest obligations. This is the ratio is measured as profit before interest and tax (PBIT) (ignoring exceptional items)/interest charges. If the interest costs are high in relation to PBIT, any fall in profits could leave the company unable to meet its interest payment obligations and in danger of being forced to liquidation. The interest cover should therefore be above three times to be considered as within acceptable limits (Coyle, 2000).

Debt ratio is the measure of the percentage amount of the company's total assets (fixed and current) that are financed by credit or otherwise. It is measured as Total creditors/Net fixed assets plus Total current assets. A ratio of over 50% indicates a high level of total borrowing. The trend in this ratio can be monitored over time (Coyle, 2000).

Recent research done by SAS and Lepus a U.K.–based investment banking management consultancy on effective credit risk management found that the main components of effective credit risk management comprise active board and senior management oversight, sufficient policies, procedures and limits; adequate risk measurement, monitoring and management information systems; and comprehensive internal controls. Lepus also found that IT was widely acknowledged to be a key component of effective credit risk management because 38% of the interviewees stated that IT played a significant role in enabling active portfolio management and assessment. Their research also revealed that Basel II was highlighted as one of the main drivers in shaping the banks' approach to credit

risk management. The next paragraph highlights the approach that Basel II has in the process of Credit risk management.

2.4 BASEL II ACCORD ON CREDIT RISK MANAGEMENT

Basel Committee on Banking Supervision stated that a comprehensive credit risk management program will address the following four areas: (i) establishing an appropriate credit risk environment; (ii) operating under a sound credit granting process; (iii) maintaining an appropriate credit administration, measurement and monitoring process; and (iv) ensuring adequate controls over credit risk (Basel, 2000)

2.5 BASEL II ACCORD ON CREDIT RISK MEASUREMENT

Financial institutions should establish an appropriate and properly controlled credit risk environment, including: a well documented strategy and sound policies and processes for assuming credit risk; well defined criteria and policies and processes for approving new exposures as well as renewing and refinancing existing exposures, identifying the appropriate approval authority for the size and complexity of the exposures; effective credit administration policies and processes, including continued analysis of a borrower's ability and willingness to repay under the terms of the debt, monitoring of documentation, legal covenants, contractual requirements and collateral, and a classification system that is consistent with the nature, size and complexity of the bank's activities or, at the least, with the asset grading system prescribed by the supervisor; comprehensive policies and processes for reporting exposures on an ongoing basis; comprehensive policies and

processes for identifying problem assets; and prudent lending controls and limits, including policies and processes for monitoring exposures in relation to limits, approvals and exceptions to limits.

In the problem assets, banks should establish and adhere to adequate policies and processes for managing problem assets and evaluating the adequacy of provisions and reserves. Laws, regulations or the supervisor require banks to formulate specific policies and processes for identifying and managing problem assets. In addition, laws, regulations or the supervisor require periodic review by banks of their problem assets (at an individual level or at a portfolio level for credits with homogenous characteristics) and asset classification and provisioning also, the supervisor confirms the adequacy of the classification and provisioning policies and processes of a bank and their implementation; the reviews supporting this opinion may be conducted by external experts. The system for classification and provisioning takes into account off-balance sheet transactions. Further, the supervisor determines that banks have appropriate policies and processes to ensure that provisions and write-offs reflect realistic repayment and recovery expectations.

If provisions are deemed to be inadequate, the supervisor has the power to require additional provisions or to impose other remedial measures, requires banks to have appropriate mechanisms in place for periodically assessing the value of risk mitigants, including guarantees and collateral. The valuation of collateral is required to reflect the net realizable value.

Laws, regulations or the supervisor establish criteria for assets to be identified as impaired. Loans are required to be classified when payments are contractually a minimum number of days in arrears (such as 30, 60, 90 days).

2.6 CREDIT RISK MANAGEMENT APPROACHES

There are traditional and new approaches to CRM. In many cases the two are used together thus making it difficult to clearly draw the line between the two approaches (Saunders A. and L. Allen, 2002). According to SAS and Lepus credit risk management practices in banks differ depending on the nature and complexity of the bank's credit activities and best practice in credit risk management should demonstrate centralisation, standardisation, timeliness, active portfolio management and efficient tools for managing exposure.

The most common traditional approaches used include rating systems, credit scoring systems and the 5 "Cs" which are Character- measure of reputation, Capital- equity contribution, Capacity- ability to repay, Collateral- to be claimed in the event of defaulting by the borrower, Cycle (or economic) conditions- state of business cycle. The level of interest is also taken into account. The new approaches include the use of Credit derivative and BIS capital requirements (Saunders A. and L. Allen, 2002).

In many banking systems, sophisticated techniques are used to manage credit risk and keep it at an acceptable level. There are essentially four factors involved in the analysis of credit risk. The first is in relation to pricing the loan. The classic approach is to charge a

higher rate of interest where the borrower is considered to have a higher risk profile. Lower risk borrowers will generally be charged a lower rate of interest. There are two potential problems with this strategy; a higher rate of interest may put the borrower under additional financial strain and make default more likely, where the loan market is buoyant the bank may not be able to charge the rate of interest it feels would be appropriate to deal with the risk factors. The second factor is to impose specific credit limits so that no single borrower will be able to borrow more than a specified amount. The third factor is the use of security to reduce risk. The effectiveness of this as a risk reduction factor depends on the quality of security that can be provided and also on how the laws in the jurisdiction allow enforcement and whether any security survives the relevant insolvency regime. The final factor for the reduction of credit risk is diversification. This is where banks should ensure that their loan portfolios are spread widely, particularly in relation to such matters as geographic spread and types of borrower. Concentrated lending has often been a problem in banking crises (Hefferman, 2005).

Credit risk analysis can be undertaken in a variety of ways with both qualitative and quantitative factors being used and effective management of credit risk can have the effect of minimizing risk but it can never totally eradicate it. Accordingly what is required is a legal framework which can ensure that credit risk factors are minimized, and this, to work well, will have to be supported by an effective system of regulation and supervision (Campbell, 2007)

2.7 RATIONALE FOR CREDIT RISK MANAGEMENT

(Stulz, 1984) was among the first to rationalize the importance of risk management for lenders and financial institutions in the business of lending. Another rationalization of risk management was done by (Santomero, 1995). There are seven reasons as to why there's a sudden surge of interest in risk as it is measured and managed. The reasons are structural increase in bankruptcies calling for accurate credit risk analysis more today than was required in the past. Disintermediation whereby capital markets have expanded and become accessible to small and mid size firms. More competitive Margins brought about by enhanced competition for lower quality borrowers. Declining and volatile values of collateral which have caused banking crises in well developed countries such as Switzerland and Japan; and more recently America and U.K., the growth of off-balance-sheet derivatives extended the need for credit analysis beyond the loan book. Technology where besides analyzing loan loss the commercial banks can manage loan portfolios based on modern portfolio theory models and techniques, and the BIS risk based capital requirements which is the greatest incentive for banks to develop new credit risk models (Saunders A. and L. Allen, 2002).

2.8 NONPERFORMING LOANS

Nonperforming loans can be defined as loans which for a relatively long period of time do not generate income; that is the principal and/or interest on these loans has been left unpaid for at least 90 days (Caprio and Klingebiel, 1999). The criteria for identifying nonperforming loans is even more variable across Sub-Saharan Africa, if one takes into

account the multiplicity of regulatory agencies and institutions across countries in the non-CFA sub-panel and the marked difference in the level of minimum capital requirement in these countries (Bloem and Gorter, 2001). However, the Basel II Commission emphasizes the need to evolve toward a standardized and internal rating-based approach

NPLs and loan losses vary with the business cycle. By the mid late 1990s loan losses in the US were at historically low levels. Loan losses once again began to increase by 2000 as the economy slowed, the stock market posted significant losses and the tragic events of September 11th 2001 began the impact on consumer confidence and business demand. Still asset quality improved after 2002 as both non current loans and net charge-offs declined in the aggregate. In addition to these non current loans for all categories of loans jumped dramatically from 1986 to 1987 as a direct result of the sharp fall in energy prices, agricultural problems, over building commercial real estate, and the tax reform act of 1986. Deregulation in the early 1980s and then the exceptional economic times of the 1990s meant that most banks raised their loan to asset ratios. They faced competition from other lenders many of whom priced credit very aggressively to establish a market presence and increase market share. They also faced stiff competition from tax exempt organizations such as credit unions and the Farm Credit system (Macdonald and Koch, 2006).

(Golden and Walker,1993) summarized the reasons for loan defaulting to 5 Cs of bad credit as follows: Complacency – Tendency by the credit analyst to assume that because things were good in the past they will be good in the future. e.g. over reliance on

guarantors, reported net worth, or past loan repayment success. Carelessness – Poor underwriting typically evidenced by inadequate loan documentation, a lack of current financial information, lack of protective covenants in the loan agreements. Communication ineffectiveness – Bank's credit objectives and policies are not clearly communicated. Managers must clearly communicate and enforce loan policies whereas loan officers should make management aware of specific problems with existing loans as they appear. Contingencies – Refers to lenders' tendency to ignore circumstances in which a loan might default. The focus is on making the deal work rather than identifying downside risk. Competition – Involves following competitor' behaviour rather than maintaining the bank's own credit standards. Doing something because the bank down the street is doing it does not mean its prudent business practice.

A study on the response of National Bank of Kenya Ltd (NBK) to the challenge of NPLs found that the causes of NPLs were both external and internal, whereby the external causes included economic downturn, government interference in lending, inflationary tendencies in the 90s, limited supervision by CBK in the 90s, inadequate government monetary policies and a slow inadequate judicial system. Internal causes included political appointments to top management, use of qualitative methods of debt appraisal which ignored analysis of financial performance of debtors, poor debt follow up, lack of management accountability for NPLs, inadequate credit policy guidelines, imprudent and reckless lending and lack of portfolio diversification. It was also found that NBK was faced

by the following challenges: liquidity problems, low profitability, bad public image, high cost of recovery, other problems associated with debt collection (Mathara, 2007).

Although, nonperforming loans remain relatively high compared to estimates recorded in industrial countries where credit risk is generally below 10 percent (Barth and Nolle, 1997), this represents a significant improvement, reflecting the implementation of banking and financial sector restructuring undertaken in a number of countries, and direct capital infusion and government support largely in the form of acquisition of bad loans at a discounted price (Basu, 1998).

Notwithstanding the relative decline of these impaired loans— sign of a relative improvement of banks position— the financial costs and implications of these loans remain far too important with lasting consequences for most of the heavily indebted poor countries and small economies of Sub-Saharan Africa. In dollar terms, the financial costs of these loans exceeded US$6 billion in Sub-Saharan African countries in 2002. Though the overall estimated dollar amount associated with these loans is much higher in other regions of the developing world, their share of GDP is significantly much smaller, especially for Asia, owning to the smaller size of the economy for most countries in Sub-Saharan Africa where on the aggregate these loans account for about 2% of GDP (Basu, 1998). The estimated costs are around US$17.6 billion for Middle East and over US$41 billion for Asia, accounting for 2.6% of GDP and 0.0015% of GDP, respectively. Since 1999, the estimated

costs of these loans have been on the rise. The latest figures indicate that they increased from less than US$150 millions to over US$200 million between 1999 and 2002.

This large gap is probably a reflection of the size of these economies, the structure of the banking system, and the difference in the scope of the crisis across the CFA and non-CFA sub-panels. The countries which were most affected by the crisis included Benin, Cameroon, Guinea-Bissau, Kenya, Nigeria, Senegal and Swaziland. In most of these countries, banks witnessed a dramatic erosion of their equity and capital. For instance, at the end of 1996, these loans accounted for over 30 percent of total loans in Cameroon; in Guinea-Bissau, they accounted for over 45 percent of commercial banks' total loans portfolios in 1995; in Kenya, financial institutions accounting for over 30 percent of total assets faced solvency problems between 1993 and 1995. In Senegal, about 50 percent of banking system loans was nonperforming in the late 80s and early 90s (Husain and Faruqee, 1994).

2.9 CREDIT RISK MANAGEMENT AND NONPERFORMING LOANS

There are several other explanations for the rise of impaired loans in the 1990s: the chronic fiscal deficits and balance of payment difficulties in numerous countries, the mismatch between the maturities of assets and liabilities, which led numerous banks and financial institutions to resort to highly-priced short-term financing in the form of interbank loans. The demand for highly-priced short-term loans further exacerbated the crisis and the accumulation of impaired loans. In some of the most affected countries where governments

were the main shareholders, a sizable share of impaired loans was owed by state governments and government agencies and institutions. This was quite common across Sub-Saharan Africa during most of the 1980s and 1990s where commercial banks were heavily involved in the financing of government fiscal deficits and loss-making public enterprises (Basu, 1998).

The scope of nonperforming loans is particularly high for banks and financial institutions, which have loans portfolios skewed toward manufacturing, commerce, and services. This is particularly the case for member countries of the West African Monetary Union. Consistently, nonperforming loans to these three sectors account for over 75% of problems loans (UMOA, 2000 & 2001). Moreover, these loans have short term maturity and are largely directed toward commerce, which accounts for over 40 percent of total impaired loans. Although the pattern and trend are consistent across countries, the contribution of these three sectors to the growth of impaired loans is more important in Benin where it averages 90% over the 90s. The distribution across sectors is also variable; nonperforming loans to services have longer maturity and are higher in Burkina Faso and Benin. Expressed as a percentage of total impaired loans, they range from 15 to 29% in Burkina Faso and from 28 to 39% in Benin (UMOA, 2001). The share of nonperforming loans to the service sector is much lower in other countries, especially in Mali, where it consistently accounts for less than 10% of the total portfolios of problems loans. Most impaired loans in this country are owed to the agricultural and fishing sectors, which account for 53 percent of all

problem loans (UMOA, 2001), a reflection of high vulnerability of banks to undiversified economies.

A study of credit risk management practices in oil companies found that all 19 oil firms were guided by a well formulated and documented credit policy document and procedures (Muriuki, 2007).

A study to evaluate the credit scoring practices in Kenyan commercial banks and assess the relationship between these credit scoring practices and NPLs found that individually owned banks have less stringent credit rules and approaches to credit appraisal. It also found that 62% of banks use credit scoring models (Mutie, 2006).

A study assessing the relationship between interest rates and NPLs in commercial banks in Kenya found that there was a weak relationship between the two. A greater proportion of NPLs will be attributed to factors other than interest rate (Ongweso, 2006).

In the period 2006/2007 Kenya Commercial banks faced various challenges including difficulties in l ending to start up businesses with no risk capital/collateral and limited management expertise and the challenge of adherence to increasing regulatory requirements aimed at maintaining the soundness of the Kenyan financial sector. The asset quality was reported to have improved whereby the NPL levels declined from 64.4 billion in December 2006 to 41.9 billion in December 2007. This improvement was attributed to

NPL resolutions, recoveries and write offs in two major bank and also a better risk management environment brought about by improved supervision in this area (CBK, 2006 & 2007).

2.10 EMPIRICAL STUDIES ON RELATED ISSUES

A study of bank failures in New England found that, of 62 banks in existence before 1984, which failed from 1989 to 1992, in 58 cases it was observed that loans and advances were not repaid in time (Sabrani 2002). The final quarter of the 20th century witnessed a huge amount of instability in the banking markets throughout the globe with more than 160 countries experiencing banking crises so severe as to have systemic implications. These problems have not been limited to specific geographical areas nor to any particular type of economy. Developed economies, such as the United States, Sweden and Japan and developing countries, including much of Latin America and South East Asia, and transitional economies, have had significant crises relating to nonperforming loans (Campbell, 2007).

As one can observe from the related studies, the data used in these studies were generated from developed countries (U.S and Europe) and Asia and for which reason the results of their findings may not be greatly inferred and fully used in emerging economies like Kenya where conditions completely vary from the European and Asian economy. It is for this reason that the study seeks to find out if there have been any significant improvements in

the reduction of nonperforming l oans in Kenya as a result of improved credit risk management practices.

A study of the asset liability management practices in commercial banks in Kenya found that Asset liability management is a relatively new concept in risk management. Most banks rated credit risk as the most critical type of risk. Though asset liability management is commonly used in general risk management, the importance is still not clear to many officials who could not justify the introduction in their banks (Odhiambo. 2006).

A study of the factors influencing credit rationing by commercial bank in Kenya found that credit rationing is highly practiced in Kenya and the main reasons why it is practiced are lack of adequate information to determine credit worthiness of the borrower, lack of profitable investment projects and balance sheet risk (Kagondu, 2002).

A study assessing the applicability of financial crisis predictive model to ban failures in Kenya found that interest rates are significant predictors of banking failures since interest rates increase in the build up of financial crisis. It also identified interest rate and a decline in NSE index as significant predictors of bank failures (Mugo, 2001).

2.11 CONCLUSION

Studies have shown that even though banks are affected by many types of risk, the main type that has to be measured and monitored closely is the credit risk. Mismanagement of this type of risk has been found to bring about the occurrence of nonperforming loans and ultimately the bankruptcy of financial institutions causing major financial crises in various corners of the world affecting both developed and undeveloped economies. Following the financial crises faced in the 1980s and 1990s it was found that even off balance sheet items like derivatives carried some element of credit risk thus bringing forth the introduction of credit risk management on off balance sheet assets.

Various studies also show that credit risk management is a process that any financial institution in the business of lending has to practice to avoid future misfortune. Most agree that it is a process with at least three steps which include identification of the risk type then measuring the significance of the risk on its own and along with other risk types affecting an organization then finally monitoring the risk to ensure that it does not go beyond an acceptable or manageable level.

The Basel II accord also emphasizes on strict credit risk management to the extent that they reward banks that carry out proper credit risk management. Following the financial crises experienced in the 1980s and 1990s in Europe and other parts of the world it was found that close supervision was needed on financial institutions to ensure that this crisis does not recur in the future. As a remedy, Banks have been required to keep adequate capital to

cover for any risky lending that may have been done. This allows banks to continue operating in a highly competitive lending market as they take care of risks generated from this type of competition.

2.12 KNOWLEDGE GAP

(Muriuki, 2007) studied the credit risk management practices in oil companies, (Mutie, 2006) studied the relationship between credit scoring practices in Kenyan commercial banks and NPLs, (Hippolyte, 2005) did a causal analysis study on NPLs in sub-Saharan Africa, (Campbell, 2007) studied the relationship between bank insolvency and the problem of NPLs, (Golden and Walker, 1993) studied the ten commandments of commercial credit, and Mathura studied the response of NBK ltd to the challenges of NPLs. As listed by these examples, one can see that there have been various studies on Credit risk management, aspects of credit risk management and NPLs with none researching on the relationship of the two and additionally not on the Kenyan commercial banks. This study aims at researching the prevalence of Credit risk management tools in the lending practice of Kenyan commercial banks and finding out which of these tools are the best in reduction of NPLs in the Kenyan commercial banks.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 RESEARCH DESIGN

The study was a survey of the financial institutions in Kenya that are located in Nairobi. The cross sectional survey design was most appropriate for this study because it made it possible to make comparisons at the same point in time across the population in question.

The cross-sectional survey was chosen rather than for instance, the case study design because the objectives of the study required a wide berth of understanding of the strategy, implementation and the challenges faced in the banking sector in their quest to manage risk of non performing loans.

3.2 POPULATION

The survey was limited to only the financial institutions in Nairobi. The population consisted of the 45 financial institutions in Kenya headquartered in Nairobi. This population consisted of 35 local banks and 10 foreign banks. Of the local banks, 3 had government shareholding, 29 were commercial banks, 2 were mortgage banks and 1 was a non banking financial institution. This population was selected since it represented the main participants in the lending process in the Kenyan environment.

3.3 NATURE OF DATA

Primary and secondary data was used to obtain the information needed.

Primary data: Consisted of information gathered by credit officers in the process of deciding whether or not to lend and the monitoring process after lending.

Secondary data: Included CBK annual supervision and statistical reports, research done by scholars, journal articles, and principles according to the Basel accord. The information obtained from these sources helped to determine the norm in the process of lending and how risk management is supposed to be carried out to reduce the occurrence of non performing loans.

3.4 SOURCES OF DATA

Primary data was obtained from credit officers. Secondary data was obtained from many sources such as books, journals, University of Nairobi students' projects, Basel accord, manuals and web sites.

3.5 DATA COLLECTION

Data was colleted by use of semi-structured and structured questionnaires. The first section contained structured questions on Credit Risk Management which was mainly to collect data on the credit granting process and the credit risk management techniques employed by the organization. The second section contained both structured and unstructured questions

related to NPLS which covered the definition per organization, what sectors of the economy were mostly affected and the effectiveness of the CBK inspection in reducing NPL growth. The questionnaires were sent to the credit managers/officers in each of the banks.

3.6 DATA ANALYSIS

A descriptive analysis was done using excel. Additionally, qualitative analysis was done in respect to some of the responses received from the respondents as well as from the secondary data. A graphical representation by use of techniques such as bar graphs, pie charts and tables was also use for easy interpretation.

3.7 DATA VALIDITY AND RELIABILITY

Data received was measured to ensure it aids in answering the research question. All the questionnaires were scanned through. From the responses received, the answers were found to be almost the same. This repeatability gave a good assurance on the reliability of the data received. The sourcing of the data was also in most cases administered through personal visits to avert errors in filling of the questionnaires. The questionnaire was designed with clear questions, was small but objective to enhance reliability of data. Some of the variables were controlled to validate the data received for instance on the question of number of years a bank had a credit risk strategy, the answer varied according to the years the bank had operated.

Secondary data was gathered from reputable sources for instance the central bank of Kenya websites as well as from distinguished journals all of which related to the objective of the study.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter covers the summary of the data obtained from the survey. The data has been analyzed and presented in the form of tables, graphs, proportions, as well as charts. It covers the link between credit risk management strategies employed by the Kenyan commercial banks and the management of nonperforming loans. Data collection was done from the commercial banks based in Nairobi with respondents being mainly the credit officers.

4.2 The Response Rate and Age Of Credit Risk Strategy

As shown chart 4.1 and Table 4.1 the response rate for the sourcing of primary data was 82%. Only 18% failed to respond to the request to feed us with the data we required for this study. The response was however significant for this study as the study found a close correlation between the banks given the overwhelming resemblance of the responses received.

On the question of age/existence of credit risk strategy in the individual banks, the study found that in most banks had had the strategy for more than 10 years. Out of the 37 respondents only 8 banks established credit strategies in the past 10 years 29 established the same more than 10 years ago. However, the banks that had young credit risk strategies

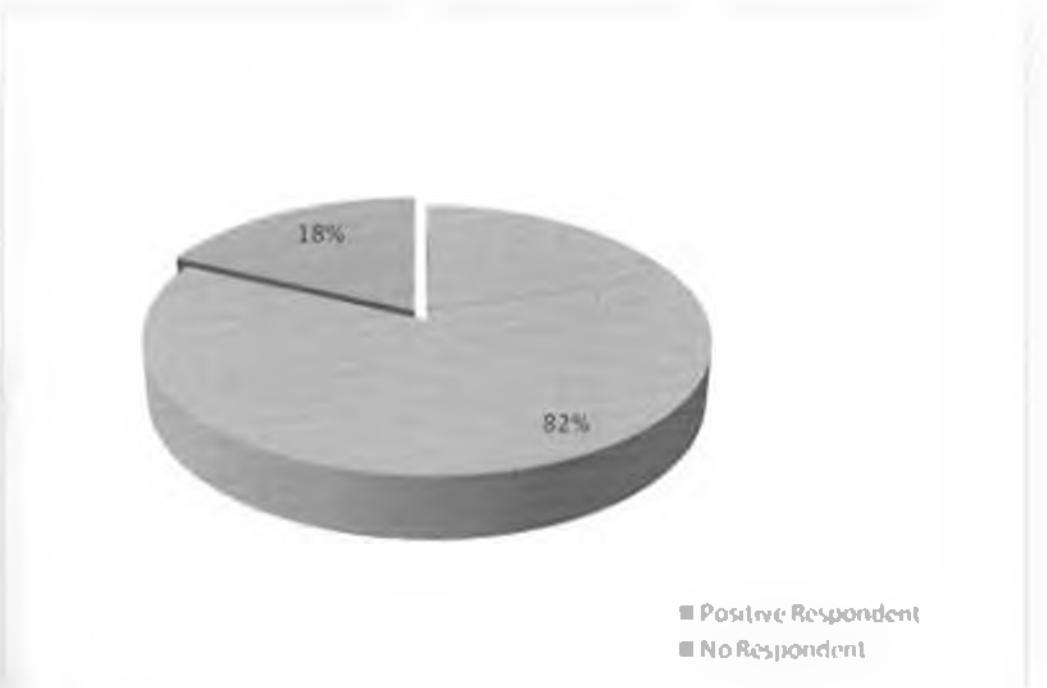
were mainly new Banks in the market/ country. The study thus found that most banks' credit risk strategies were almost as old as their years of operation in the country

Table 4.1 Respondents Response Rate

	POPULATION	PROPORTION (%)
Positive Respondents	37	82%
No Respondents	8	18%
TOTAL	45	100%

Source: *Research data*

Chart 4.1 Respondents Response Rate



Source: *Research data*

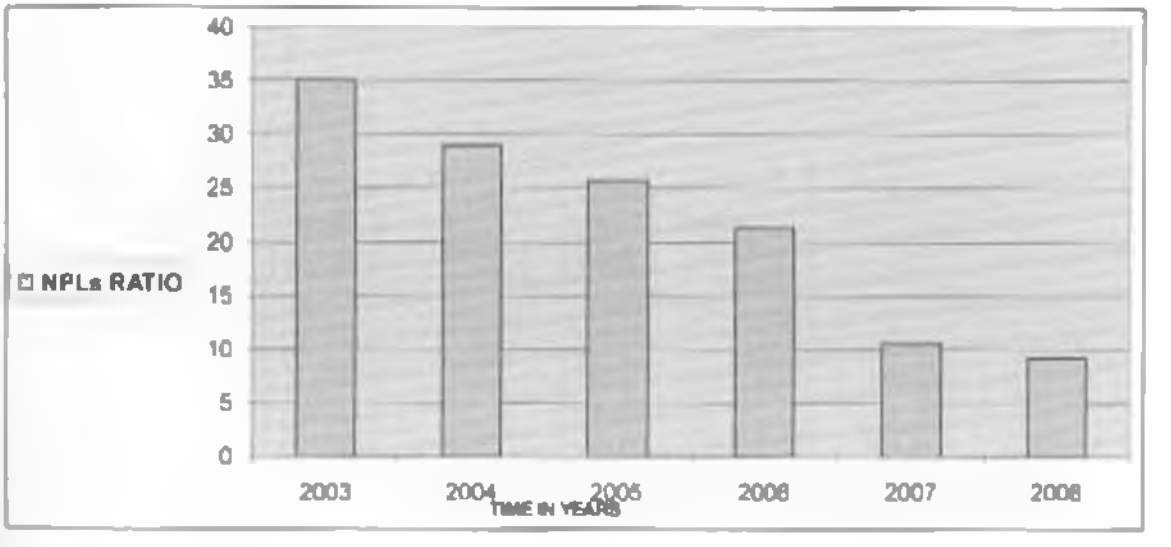
4.3 Asset Quality

Defined as the estimation of quality of a bank's assets basically loans and leases, as measured by a lender's credit risk standards and liquidity of securities held in the investment portfolio. The analysis of the financial sector in Kenya in terms of asset quality has seen an improvement of asset quality as shown in graph 4.1 below. Asset quality is determined by among others the NPLs ratios. NPLs ratio is inversely proportional to asset quality.

Asset Quality= X/NPLs ratio

NPLs Ratio= Gross Non performing loans in the financial sector/Total loans advanced

Graph 4.1 NPLs RATIO



Source: *Research data*

The impact of large NPLs in the financial system is bank failure as evidenced by the international financial crisis of 2008. Asset quality has been found to be able to predict insolvency which arises due to high level of NPLs prior to bank failure (Barr and Siens, 1994).

The graph shows a steady decline of the NPLs ratio from a high of 35% in 2003 to a low of 9.23% in 2008. The improved asset quality in Kenya has been mainly because of enhanced corporate governance and risk management, strict provisioning policy, enhanced credit underwriting, adherence to finance act 2006 enabling sharing of information on nonperforming loans, and adherence to the duplun rule forbidding charging of interests On NPLs.

Table 4.2 NPLs Ratio from 2003 to 2008

YEARS RANGE	NPL RATIO (%)	% CHANGE FROM PREVIOUS YEAR	
2003	35	0	BASE YEAR
2004	29	17.14	
2005	25.7	16.2	
2006	21.3	17.12	
2007	10.64	50.05	
2008	9.23	13.25	

Source: *Research data*

As shown in Table 4.2 there has been a constant decline in the NPLs ratio and the huge change of 50.05% between the years 2006-2007 demonstrates that given strict credit risk

management policies coupled with central bank supervision can greatly reduce NPLs and stabilize the financial sector.

4.4 Nonperforming Loans, Credit Risk, and Bad Debt Provisioning

The study found out that though asset quality for the financial sector had been improving for the sampled period 2003-2008, the banks continued to increase the provisions for bad debts. Analyzing the financial results for four major banks for the year 2008 reflects an alarming rate of increase of this provision. Barclays bank and Kenya Commercial bank combined share a third (1/3) of the Kenyan market in terms of loan advances.

Table 4.3 Loan Loss Provision 2007 And 2008

Bank	Provision 2007	Provision 2008	% change
Equity bank	25 million	1 billion	4100%
Barclays bank	688 million	1.2 billion	75%
NIC bank	100 million	194 million	94%
Kenya Commercial bank	750 million	1.4 billion	88%

Source: *Research data*

Bank credit risks rise when the level of nonperforming loans compared to customer deposits is high. The study found that the asset ratios declined over the years due to write offs against provisions held therefore the increase in the provisions as reflected in table 4.3 above are meant to cushion the banks against credit risks despite the same limiting profitability.

4.5 Relationship between Nonperforming Loans and Credits Risk Management Techniques

The study sought to assess the effect of employing different credit risk management techniques on the level of nonperforming loans. To this end the questionnaire was designed to address the main credit risk techniques pursued by the banks in Kenya to reduce nonperforming loans. Table 4.4 below shows credit risk techniques used in the Kenyan banking sector.

Table 4.4 Credit Risk Techniques Used in Kenyan Banks

Credit risk tool/technique	No. of banks using	Banks not using	% of non usage
Pricing	25	12	32.4
Credit Limits	37	0	0
Diversification	37	0	0
BIS requirements	37	0	0
Loan selling	18	19	51.4
Syndication of loans	28	9	24.3
Credit Insurance and securitization	37	0	0
Credit scoring	37	0	0

From the foregoing, the study found that most banks take keen interest in pursuing the available credit risk techniques. However, that loan selling, syndication of loans and pricing are not commonly used in Kenya More than half (51.35%) of the banks interviewed did not use loan selling as a technique to manage credit risk

The fact that most of the credit risk management tools are used by the banks is a clear indication of the use of credit risk tools to manage the banks' nonperforming loans. The decline of the NPLs ratio in Kenyan financial sector as seen in Graph 4.1 above is therefore

well explained by the collective usage of the credit risk techniques by Kenyan banks. These tools are internationally accepted and used and have a major bearing on the containment of nonperforming loans growth if well implemented.

4.6 Summary and Interpretations

The objective of the research was to assess the effect of employing different credit risk management (CRM) techniques on the level of nonperforming loans (NPL) . The research found that there are various techniques used in the Kenyan banking sector in addition to those they are required to use by the Central Bank of Kenya (CBK). The combination of these techniques have aided in the successful reduction of NPLs in the kenyan banking sector. The research also found that there were some techniques that all the banks used while others were selectively used by individual banks and not by others.

Credit scoring, Bis requirements, credit insurance, securitization, diversification, and credit limits were found to be the most commonly used techniques. This study found that asset quality has improved over the years and as a result, upward growth in NPLs in Kenyan banks is considered by the CBK as a bad indicator.

All the correspondent banks were found to be sensitive to the international requirements of credit risk management as stipulated by the basel II accord. Graph 4.1 above shows a steady reduction of NPLs over five years from year 2003 to year 2008. This we found to be an indication that the combinations of credit risk management techniques used by the

Kenyan banks have been successful in the reduction of NPL growth in the sector. This brings us to the conclusion that if a bank were to use a combination of atleast six of the CRM tools mentioned above in table 4.4 they would successfully reduce the upward growth in NPLs with the help of CBK supervision which is done annually.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter of the study gives highlights on the findings, conclusions, recommendations, and suggestions for further study.

5.2 Summary of the Findings

The objective of this study was to establish the degree of effect of employing different credit risk management techniques on the level of nonperforming loans. In assessing this, the study sought to establish the relationship between credit risk management and nonperforming loans by pursuing a survey of the Kenyan banking sector.

The study has established that the credit management techniques employed by the banks are quite similar within the banking sector. These were found to be of international standards common of which comprised credit scoring, Bis requirements, credit insurance and securitization, diversification, and credit limits. The Central Bank's monthly economic review for June 2009 shows that the stock of gross non-performing loans increased by a whopping 19.9 per cent from Sh58.3 billion to Sh69.9 billion in May 2009 alone. This may be as a result of the financial crisis of 2008 that arose as a result of the fall of the Lehmann Brothers in the United States that led to recession in world economies, and also due to the effects of the 2008 political crisis in the Kenya. This study found that asset quality has

improved over the years and due to this, upsurge in NPLs in Kenya as per the results of the CBK, is a bad indicator.

On the nonperforming loans the study found that the general predetermined time for a loan advance to be declared nonperforming is 3 months of non fulfillment of borrower's financial obligation to the lender this is in line with the international banking practice and also recognized by the International Monetary Fund. And as a corrective measure the study found out that all the banks have departments that deal with credit risk and also pursue vigorous debt collection to minimize write-offs as a result of nonperforming loans.

5.3 Conclusions

Credit risk management describes a set of procedures and policies set by management to control and prevent the financial institution from incurring financial losses as a result of borrowers being unable to meet their financial obligations. Management prescribes a set of tools to aid in the management of these risks and potential risk.

Nonperforming loans arise as a result of borrowers being unable to meet their financial obligations for a predetermined time. The causes of nonperforming loans are diverse including imprudent lending policies, macroeconomic instability as well as lending to risk borrowers (collier, 1993).

The study found out that the decline of the NPLs as evidenced in the asset quality from a high of 35% in 2003 to a low of 9.23% in 2008 (Table 4.2) was a result of various factors

including corporate governance and risk management, encouraging economic growth, credit underwriting, sharing of information among banks, and strict provisioning policy We can conclude that credit risk management is related to nonperforming loans and that with well defined and accurately implemented credit management policies and procedures the individual banks' NPLs will decline. Low NPLs are a recipe for economic growth and stability as well as confidence in the financial sector.

5.4 Recommendations

As a result of the collapse and financial crisis of 2008 there is need for all the banks to address the problem of potential toxic loans There higher the level of nonperforming loans the higher the probability of failure of the bank as the bank's equity gets wiped out.

As much as the study has found that all the banks in Kenya have credit risk strategies and internal rating system it is also imperative to increase the staff in the loan areas to enhance vetting and adequate adherence to the credit risk policies to proactively reduce potential nonperforming loans if the increase in the bank provisions as analyzed in table 4.3 is anything to go by. Studies have also shown that the increase of nonperforming loans in Kenya has also been enhanced by high interests levied to "high risk" customers (Ongweso, 2006). In this regard it would be recommendable to address the issue of interest rates as this leads to high levels of nonperforming loans thus credit risk and at the same time making banks lose on the potential low risk customers. The question of interest rates has been variously addressed by the central bank of Kenya. Central bank of Kenya lowered cash

reserve ratio twice (CRR) for the period December 2008 to July 2009 and also lowered the central bank rate (CBR) four times during the same period to lows of 7.75% -CBR, and 4.5% -CRR. However, the commercial lending rates by the banks remained unchanged. The result of this is the high cost of borrowing and increase in nonperforming loans, hence the decline of borrowers and credit risk of default in loan repayments.

It is also evident that all Kenyan banks are well aware of the impact and relationship of credit techniques and nonperforming loans as evidenced by the use of internationally recommended techniques by the banks. It is therefore recommended that the banks continue the use of these techniques to help check on nonperforming loans.

5.5 Limitations of the Study

This study was limited in several dimensions.

Firstly not all the expected respondents did respond as the study managed to get only 82.2% of positive response. Sourcing information was difficult in some areas as some respondents were apprehensive more so given the sensitivity of the population of study.

Secondly financial hitches and time constraints affected the study as the study required a lot of study and corrections from time to time to reach its conclusive end. Equally time was not enough to ensure all responses were received as some respondents had lots of pressure at work to fill the questionnaires in time.

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Thirdly it was not easy to get all the credit officers to fill the questionnaires and give adequate time for interview hence in some instances the credit managers referred us to their assistants to enable us get the data.

5.6 Suggestion for Further Research

This study was a survey of the credit risk management and management of loans among the cross section of the Kenyan banks. The study did not look into detail at the in-depth implementation of the credit risk management tools. It would therefore be imperative to do a study on the same. , especially for those that were found to be unpopular with banks.

It would also be imperative to do a study on the fundamental effectiveness of each one of the credit risk management tools including those tools that were found to be unpopular with banks.

The study also did not look in-depth into the main causes of nonperforming loans in Kenya and how the causes affect and are addressed in the credit management policies and tools. It would therefore be vital to study the causes of nonperforming loans and the credit risk policies.

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Wall Street Journal, Monday, November 3, 2008.

APPENDIX I: Letter of Introduction

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS

TO WHOM IT MAY CONCERN

APPENDIX 2: Interview Questionnaire

PART A : Credit Risk Management

1) What is the nature of ownership of the bank?
   a) Local bank
      i) Government shareholding
      ii) Commercial Bank
      iii) Mortgage bank
      iv) Non banking financial institution
   b) Foreign bank

2) Does the bank have a credit risk strategy?
Yes/No

3) How old is the credit risk strategy?
   a) Less than 1 year old
   b) Between 1 to 5 years old
   c) Between 5 to 10 years old
   d) More than 10 years old

4) How often does the Board of Directors review the Credit risk strategy?
   a) Quarterly
   b) Yearly
   c) After every 2 Years
   d) After every 5 Years
   e) Whenever the need arises
   f) The strategy has never been changed.

5) Does the bank have a well defined credit granting criteria?
Yes/No

6) Does the bank have an internal risk rating system?
Yes/No

7) Does the Board of Directors have a say in the approval process of lending?
   a) All facilities must be approved by the Board of Directors
   b) Some facilities must be approved by the Board of Directors: Specify

   _____

   c) The Board of Directors is never involved in the approval process of lending

8) What combination of the following qualitative information do you look for when vetting a customer before advancing credit?

a) Character
b) Capital position of customer's business
c) Customer's management expertise
d) Economic conditions affecting the customer
e) Collateral
f) Other: _____

9) What combination of the following credit risk management techniques do you look for when vetting a customer before advancing credit?

a) Pricing
b) Credit limits
c) Diversification
d) BIS requirements
e) Loan Selling
f) Syndication of loans
g) Credit Insurance and securitisation
h) Credit scoring
i) Other: _____

10) Which of the following calculations does the bank perform when deciding whether to lend?

a) Financial Leverage
b) Interest Cover
c) Debt ratio
d) All of the above

11) After advancing credit to a borrower does the bank do the following?

a) Visit the customer periodically.
b) Call the customer periodically to check on progress after lending.
c) Review facility based on economic changes affecting customer and/or the bank.
d) All of the above
e) None of the above

12) Do you have unsecured loans in your portfolio?
Yes/No

13) If yes, what considerations are put in place when advancing such loans?

PART B: Nonperforming Loans

1) At what stage do you consider a loan to be nonperforming?
   a) 1 to 3 months arrears
   b) 3 to 6 months arrears
   c) 6 to 12 months arrears
   d) More than 12 months arrears

2) From which sector do you have the most borrowers?

_____

3) From which sector do you have the biggest percentage of nonperforming loans

_____

4) What are the corrective actions that the bank has taken up to reduce nonperforming loans?

_____

_____

_____

_____

_____

5) Has the supervision done by the Central Bank of Kenya (CBK) helped reduce the occurrence of nonperforming loans in the bank?
Yes/No

6) How often does the CBK inspect the bank?
   a) Yearly
   b) Every two years
   c) There is no time specification to when they come to investigate
   d) They have never come to inspect the bank

7) When was the last time CBK inspectors came to inspect the bank?
   a) Last year
   b) 2 years ago
   c) 2 to 5 years ago
   d) More than 5 years ago

APPENDIX 3: List of Banks in Kenya

I. Institutions in Terms of Shareholding

a). Foreign Owned Institutions

i). Foreign owned not locally incorporated

Bank of Africa (K) Ltd.
Bank of India
Citibank N.A. Kenya
Habib Bank A.G. Zurich
Habib Bank Ltd.

ii) Foreign owned but locally incorporated institutions (Partly owned by locals)

Bank of Baroda (K) Ltd.
Barclays Bank of Kenya Ltd.
Diamond Trust Bank Kenya Ltd.
K-Rep Bank Ltd.
Standard Chartered Bank (K) Ltd
Ecobank Ltd
Gulf Africa Bank (K) Ltd
First Community Bank

b). Insitutions with Government Participation

Consolidated Bank of Kenya Ltd.
Development Bank of Kenya Ltd.
Housing Finance Ltd.
Kenya Commercial Bank Ltd.
National Bank of Kenya Ltd.
Savings & Loan Kenya Ltd.
CFC Stanbic Bank Ltd.

c). Institutions Locally Owned

African Banking Corporation Ltd.
City Finance Bank Ltd.
Commercial Bank of Africa Ltd.
Co-operative Bank of Kenya Ltd
Credit Bank Ltd.
Charterhouse Bank Ltd.
Chase Bank (K) Ltd.

Dubai Bank Kenya Ltd
Equatorial Commercial Bank Ltd.
Equity Bank Ltd.
Family Bank Ltd.
Fidelity Commercial Bank Ltd.
Fina Bank Ltd.
Giro Commercial Bank Ltd.
Guardian Bank Ltd.
Imperial Bank Ltd.
Investment & Mortgages Bank Ltd.
Middle East Bank (K) Ltd.
NIC Bank Ltd.
Oriental Commercial Bank Ltd.
Paramount Universal Bank Ltd.
Prime Bank Ltd.
Southern Credit Banking Corporation Ltd.
Trans-National Bank Ltd.
Victoria Commercial Bank Ltd.

II. Institutions Listed on the NSE

Barclays Bank of Kenya Ltd.
CFC Stanbic Bank Ltd.
Equity Bank Ltd.
Housing Finance Ltd.
Kenya Commercial Bank Ltd.
NIC Bank Ltd.
Standard Chartered Bank (K) Ltd.
Diamond Trust Bank Kenya Ltd
National Bank of Kenya
Co-operative Bank of kenya Ltd