

**DETERMINANTS OF NON PERFORMING LOANS AMONG
COMMERCIAL BANKS IN KENYA**

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D61/73502/2009**



**A RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION,
SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI**

OCTOBER 2011

DECLARATION

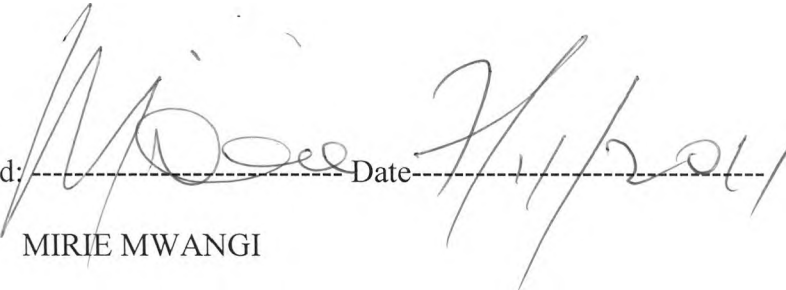
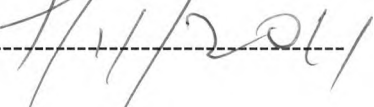
I, the undersigned declare that this is my original work and has not been submitted to any other college or university.

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This project report has been presented with my approval as the university supervisor

Signed:  Date: 

MIRIE MWANGI

DEDICATION

I dedicate this research project report to my family; my dearest Dad Zablon Atiavila and Mum Mable Atiavila for their encouragement and support during the study.

ACKNOWLEDGEMENT

I wish to acknowledge the wise and constructive support of my supervisor Mirie Mwangi throughout the research process. I also wish to thank the Credit Officers in the Commercial banks in Kenya involved in the study for their support and willingness to participate in provision of the information required for this study.

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ABBREVIATIONS

CBK	-	Central Bank of Kenya
ED	-	Exposure at Default
FIs	-	Financial Institutions
FIVE Cs	-	Complexity, Carelessness, Communication, Contingencies and Competition
GDP	-	Gross Domestic Product
LGD	-	Loss Given Default
NPA	-	Non Performing Assets
NPL	-	Non- Performing Loans
NSE	-	Nairobi Stock Exchange
PD	-	Probability of Default
SAS	-	Statistical Analysis Software

ABSTRACT

This study sought to determine the relationship between Non-performing Loans and its determinants among Commercial Banks in Kenya. The research methodology used was a Descriptive survey design and the population of study was all Commercial Banks in Nairobi region.

Data collected was edited for accuracy, uniformity, consistency and completeness and arranged to enable coding and tabulation for final analysis. The study also used multiple linear regressions to analyse the data.

The study found out that a number of determinants affected loan defaults among them level and sources of income was the greatest. Poor credit analysis did have a significant impact on loan defaults as well as a loanee's commitment to loan repayment. Rate of interest, loan repayment periods, type of loans also contributed to loan defaults. Character of a loanee was most considered when appraising loan applications being one of the characteristics included in the credit scoring card. As a result, it was clear that all banks loan books contained a significant level of non-performing loans.

The study recommends that Commercial Banks should put more emphasis on implementation of credit risk management techniques and further research to be done on whether collateralized assets are less risky as compared to non-collateralized assets.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Corporate scandals and diminished confidence in financial reporting among investors and creditors have renewed corporate governance as a top-of-mind priority for boards of directors, management, auditors, and stakeholders. At the same time, the number of companies trying to manage risk across the entire enterprise is rising sharply Sobel and Reding, (2004). Risk management helps ensure effective reporting and compliance with laws and regulations, and helps avoid damage to the entity's reputation and associated consequences. It delivers a current, credible understanding of the risks unique to an organization across a broad spectrum that includes all types of risk (credit risk, operational risk, market risk, liquidity risk and trading risk), lines of business and other key dimensions SAS, (2010).

Commercial banks extend credit to different types of borrowers for many different purposes. For most customers, bank credit is the primary source of available debt financing. For banks, good loans are the most profitable assets. As with any investment, extending loans to businesses and individuals involves taking risks to earn high returns Scott & Timothy, (2006). They further state that the most prominent assured risk is credit risk.

Omutunde, (2002), states that among the major objectives of public policy worldwide have been financial system stability and efficiency. Several experiences of financial crises in the 1990s have reinforced the view that, in the design and implementation of policies for effective management, it is important to pay serious attention to risk, efficiency and governance in financial systems and markets. He further argues that a sound financial system will contain, predominantly, banks with adequate capital to withstand the most probable adverse shocks, and will have staff skilled in assessing conditions and coming up with solutions to manage liquidity, credit, market and other risks.

Today, banks are viewed as originating riskier assets. Their funding rates are competitive market rates. The differences between funding and lending rates are mostly viewed as compensation for risk. Earnings are primarily generated by activities that explicitly or implicitly earn fees. The portfolio is viewed as a tool to support the bank's activities. In this new view, banks earn money from loans by their underwriting or distribution activities. These earnings are represented by the difference in value between the funds lent and the claim created on the borrower Omutunde, (2002).

The role of commercial banks in an economy cannot be emphasized more. As pointed out by Scott & Timothy, (2006), commercial banks play an important role in facilitating economic growth. Banks deposits represent the most liquid form of money. On a micro economic level, commercial banks represent the primary source of credit to most small businesses and many individuals. They continue by stating that loans are the major asset in most banks portfolio and generate the greatest amount of income. They also exhibit the highest default risk and some are relatively illiquid.

1.1.1 Credit Risk

Credit risk is associated with the quality of individual assets and the likelihood of default. It is extremely difficult to assess individual asset quality because limited published information is available Scott & Timothy, (2006). Credit risk is the potential variation in net income and market value of equity resulting from non payment or delayed payment. Different types of assets and off-balance sheet activities have different default probabilities. Loans typically exhibit the greatest credit risk.

The foremost issue in assessing credit risk is determining a borrower's commitment and ability to repay debts in accordance with the terms of a loan agreement. An individual's honesty, integrity and work ethic typically evidence commitment. Even if the numbers look acceptable, a bank should lend nothing if the borrower appears dishonest. Whenever there is deception or lack of credibility, a bank should not do business with the borrower Golden, Sam & Harry, (1993).

Anthony & Cornets, (2007) defines credit risk as the risk that the promised cash flows from loans and securities held by FIs may not be paid in full. It arises because of the possibility that the promised cash flows on financial claims held by FIs, such as loans or buy bonds will not be paid in full. However, in general, FIs that make loans and buy bonds with long maturities are more exposed to credit risk than are FIs that make loans and buy bonds with short maturities.

1.1.2 Non Performing Loans/Assets

Exposure to credit risk gives rise to NPLs. Hennie & Bratanovic, (2009) defines NPLs as assets not generating income. This is when principal or interest is due and left unpaid for 90 days or more. Loan defaults are inevitable in any lending. What banks do is to minimize the risk of default. As pointed out by Scott & Timothy, (2006), many factors can lead to loan defaults. An entire industry can decline because of general economic events; firm specific problems may arise from changing technology, labour strikes, shifts in customer preferences or bad management. Individual borrowers find their ability to repay closely follows the business cycle as personal income rises and falls.

Changes in general economic conditions and a firm's operating environment alter the cash flow available for debt service. These conditions are difficult to predict. Similarly, and individuals ability to repay debts varies with changes in employment and personal net worth. For this reason, banks perform a credit analysis on each loan request to assess a borrower's capacity to repay. These risks can substantial but are difficult to measure from published data Scott & Timothy, (2006). All commercial banks lend money to borrowers with the hope that payments of both principal and interest will be done promptly and that loans will not go bad. This is not always the case since some loans end up being non performing assets. As pointed out by Frederic, (2007), banks and financial institutions must make successful loans that are paid back in full and so subject the institution to little credit risk.

A survey conducted by the CBK in 2004 indicated that Kenyan Commercial Banks had gaps in their risk management practices. The results prompted the CBK to issue a set of guidelines on risk management frameworks CBK, (2007). In addition, a speech by Professor Njuguna Ndung'u, the governor of CBK at the opening of the 7th East African banking school said that, "East African Commercial Banks need to adopt sound credit risk management practices before the regions central banks can implement the Basel II Accord".

Adverse selection in loan markets occurs because bad credit risks (those most likely to default on their loans) are the ones who usually line up for loans. In other words, those who are most likely to produce an adverse outcome are the most likely to be selected. Borrowers with very risky investment projects have much to gain if their projects are successful, so they are the most eager to obtain loans. Clearly, however, they are the least desirable borrowers because of the greater possibility that they will be unable to pay back their loans Frederic, (2007).

Consequently, moral hazard exists in loan markets because borrowers may have incentives to engage in activities that are undesirable from the lenders point of view. In such situations, it is more likely that the lender will be subjected to the hazard of default. To be successful, financial institutions must overcome the adverse selection and moral hazard problems that make loan defaults more likely Frederic, (2007).

The Basel Committee in its paper "Principles of the Management of Credit Risk, 1999", states that for most banks, loans are the largest and most obvious source of credit risk; however, other sources of credit risk exist throughout the activities of a bank, including in the banking book and in the trading book, and both on and off the balance sheet. Banks are increasingly facing credit risk (or counterparty risk) in various financial instruments other than loans, including acceptances, interbank transactions, trade financing, foreign exchange transactions, financial futures, swaps, bonds, equities, options, and in the extension of commitments and guarantees, and the settlement of transactions.

Thus, inadequate credit risk assessment policies and procedures, which may lead to inadequate and untimely recognition and measurement of loan losses, undermine the usefulness of capital requirements and hamper proper assessment and control of a bank's credit risk exposure.

1.1.3 Relationship between NPLs and their determinants

One of the most important aspects of lending is determining the customer's desire to repay the loan. Information in the credit file will give the credit officer documentation on the customer's repayment history Golden, Sam & Harry, (1993). Although commercial banks have measures in place to guard against loan defaults, such as insuring their loans, taking mortgage on landed properties, stocks, bonds and other securities to fall on in times of default, loan default has become an inevitable part of the banking or lending business Samuel, (2011).

1.1.4 Banking Industry in Kenya

Commercial banks are licensed and regulated under the Banking Act, Cap 488 and Prudential Regulations issued there-under. There are currently 45 commercial banks in Kenya. Out of the 45 institutions, 33 are locally owned and 12 are foreign owned. The locally owned financial institutions comprise 3 banks with significant government shareholding and 28 privately owned commercial. The foreign owned financial institutions comprised 8 locally incorporated foreign banks and 4 branches of foreign incorporated banks. Of the 42 private Banking institutions in the sector, 71% are locally owned and the remaining 29% are foreign owned CBK, (2010).

The Domestic credit provided by banking sector (% of GDP) in Kenya was reported at 40.09 in 2008, according to the World Bank. The Commercial Banks have been selected for the study because of the recent emphasis on Risk Management and the increasing levels of NPLs in Kenyan Banking driven by the Central Bank viz. the Central Bank of Kenya guidelines as well as banks' own recent initiatives towards risk management. A process of financial liberalization was initiated in the 90s to make the banking system profitable, efficient, and resilient. The liberalization measures consisted of deregulation

of entry, interest rates, and branch licensing, as well as encouragement to state owned banks to get listed on stock exchanges. With the liberalization came risks that banks needed to manage. It is therefore a suitable time to perform an analysis of the causes of NPLs and risk management strategies in Commercial Banks in Kenya. The Basel-II norms, which include a move towards better risk management practices, also necessitate such a study CBK, (2010).

1.2 Statement of the Problem

Since exposure to credit risk continues to be the leading source of problems in banks world-wide, banks and their supervisors should be able to draw useful lessons from past experiences. Banks should now have a keen awareness of the need to identify, measure, monitor and control credit risk as well as to determine that they hold adequate capital against these risks and that they are adequately compensated for risks incurred Basel Committee, (1999).

The goal of Credit Risk management is to maximize a financial institution's risk adjusted returns by maintaining credit risk exposure within acceptable parameters Sinkley, (1992). Financial 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 of risk management and essential to the long term success of any financial organization.

Since it is more likely that banks will be exposed to moral hazard and adverse selection when advancing loans to borrowers, credit assessment of loans is inevitable. This should be done with a clear mind that there is great potential that most borrowers default. Frederic, (2007), points out that financial institutions attempt to solve these problems by coming up with ways and means for managing credit risk: Screening and monitoring, establishment of long-term customer relationships, loan commitments and compensating balance requirements and credit rationing.

The following studies have so far been done: On credit risk management Njiru, (2003); Kioko,(2008); Ngare, (2008); Simiyu, (2008); and Wambugu, (2008), information systems risk management Weru, (2008) and foreign exchange risk management Kipchirchir, (2008). In as much as Kioko (2008) and Ngare (2008) focused on commercial banks, the concept that they focused on was credit risk management techniques. The closest study so far was by Wambua (2010) on enterprise risk management strategies and practices in commercial banks in Kenya. Further, the study did not cover strategies used to manage internet banking risks. A study by Uppal (2011) in India on internet banking risk mitigation strategies noted the influence of internet banking on performance and only proposed the strategies the banks could use to manage internet banking risks. It is clear from the studies above that determinants of determinants of NPLs in Commercial Banks has not been done. There is therefore a gap as far as studying the determinants of NPLs in Commercial Banks in Kenya is concerned. The study therefore seeks to answer the following research question: ‘what are the determinants of NPLs in Commercial banks in Kenya and how are they mitigated?’

1.3 Research Objective

The objectives of the study are:-

- i) To examine the determinants of NPLs in Commercial Banks in Kenya.
- ii) To establish the methods that Commercial Banks use to guard against or to mitigate increases in the level of NPLs.

1.4 Importance of the Study

Credit risk management cannot be underscored especially in this age and era of tech savvy fraudsters. The importance of the Banking sector in the economy means risks associated with lending must be monitored, measured and controlled at all levels. This paper seeks to raise awareness to Commercial banks on the causes of the ever increasing NPLs in their loan books and help them come up with new techniques to prevent or reduce rates of default thus minimizing the levels of NPLs. The will assist all commercial banks in managing credit risk.

The risk environment is so dynamic and changes in policies for managing credit risk which comes from loans advanced to borrowers is inevitable. This study is intended for managers, directors and other leaders in financial institutions as well as for policy makers in the Banking industry whose varied policies and interventions currently both support and hinder financial services and their performance in the Region.

The study will come in handy to support the Government as a regulator in its quest to streamline operations in the banking sector putting in mind that the economy as a whole inches on how the banking sector performs. High levels of NPLs can hinder growth in the economy. There is a contagion effect between banks performance and economic performance. In addition, the study will form a basis for further studies. Students interested in Finance as a subject will find it useful and build on the existing body of knowledge.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter examines the literature on causes of Loan defaults in commercial Banks in Kenya. The goal of credit risk management is to maximise a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Banks should also consider the relationships between credit risk and other risks. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization Basel Committee, (1999).

Risk management is the process by which managers identify, assess, monitor and control risks associated with a financial institutions activities. The complexity and range of financial products have made risk management more difficult to accomplish and evaluate Scott & Timothy, (2006).

2.2 Credit Risk Management

The process of Credit Risk Management should encompass, measurement of Risk through Credit Rating / Scoring, quantifying the Risk through expected loan losses, risk pricing on a scientific basis, controlling Risk through effective Loan Review mechanism and Portfolio Management Mukherjee, (2005).

Risk management is a process by which managers identify, assess, maintain and control risks associated with a financial institution's activities. The complexity and range of financial products have made risk management more difficult to accomplish and evaluate Scott & Timothy, (2006).

The goal of credit risk management is to maximize a financial institution's risk adjusted returns by maximizing credit risk exposure within acceptable parameters. Financial 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 of risk management and essential to the long-term success of any financing organization Sinkley, (1992).

Credit risk management involves the systems, procedures and controls which an organization has in place to ensure the efficient collection of customer payments and minimization of the risk of nonpayment McMenamain, (1999).

Oldfield and Santomero (1997) investigated risk management in financial institutions. In this study, they suggested four steps for active risk management techniques: (1) the establishment of standards and reports; (2) the imposition of position limits and rules (i.e. contemporary exposures, credit limits and position concentration); (3) the creation of self investment guidelines and strategies; and (4) the alignment of incentive contracts and compensation (performance-based compensation contracts).

2.3 Theoretical Review

Four theories are relevant in risk management and NPL management and are therefore discussed. These are the financial economics theory, the agency theory, the new institutional economics theory, and the stakeholder theory.

2.3.1 Financial Economics Approach

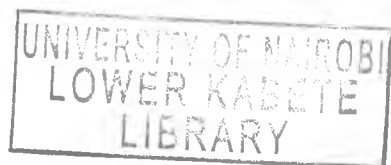
Financial economics approach to corporate risk management has so far been the most prolific in terms of both theoretical model extensions and empirical research. This approach builds upon classic Modigliani-Miller paradigm Miller and Modigliani, (1958) which states conditions for irrelevance of financial structure for corporate value. This paradigm was later extended to the field of risk management. This approach stipulates also that hedging leads to lower volatility of cash flow and therefore lower volatility of firm value. Rationales for corporate risk management were deduced from the irrelevance

conditions and included: higher debt capacity Miller and Modigliani, (1963), progressive tax rates, lower expected costs of bankruptcy (Smith and Stulz, 1985), securing internal financing Froot et al., (1993), information asymmetries (Geczy et al., (1997) and comparative advantage in information Stulz, (1996). The ultimate result of hedging, if it indeed is beneficial to the firm, should be higher value-a hedging premium.

Evidence to support the predictions of financial economics theory approach to risk management is poor. Although risk management does lead to lower variability of corporate value e.g. Jin and Jorion, (2006), which is the main prerequisite for all other effects, there seems to be little proof of this being linked with benefits specified by the theory. One of the most widely cited papers by Tufano (1996) finds no evidence to support financial hypotheses, and concentrates on the influence of managerial preferences instead. On the other hand, the higher debt capacity hypothesis seems to be verified positively, as shown by Faff and Nguyen (2002), Graham and Rogers (2002) and Guay (1999). Internal financial hypothesis was positively verified by Guay (1999) and Geczy et al. (1997), while it was rejected by Faff and Guyen (2002) and Mian (1996). Judge (2006) found evidence in support of financial distress hypothesis. Tax hypothesis was verified positively by Nance, Smith and Smithson (1993), while other studies verified it negatively Mian, 1996; Graham and Rogers (2002). More recently Jin and Jorion (2006) provide strong evidence of lack of value relevance of hedging, although some previous studies have identified a hedging premium Allayannis and Weston, (2001), Carter et al., (2006).

2.3.2 Agency Theory

Agency theory extends the analysis of the firm to include separation of ownership and control, and managerial motivation. In the field of corporate risk management agency issues have been shown to influence managerial attitudes toward risk taking and hedging (Smit and Stulz, (1985). Theory also explains a possible mismatch of interest between shareholder management and debt holders due to asymmetries in earning distribution, which can result in the firm taking too much risk or not engaging in positive net value projects (Mayers and Smith, 1987). Consequently, agency theory implies that defined hedging policies can have important influence on firm value (Fite and Pflleiderer, 1995).



The latter hypotheses are associated with financing structure, and give predictions similar to financial theory. Managerial motivation factors in implementation of corporate risk management have been empirically investigated in a few studies with a negative effect (Faff and Nguyen, 2000; MacCrimmon and Wehrung, 1990; Geczy et al., 1997). Notably, positive evidence was found however by Tufano (1996) in his analysis of the gold mining industry in the US. Financial policy hypotheses were tested in studies of the financial theory, since both theories give similar predictions in this respect. All in all, the bulk of empirical evidence seems to be against agency theory hypotheses however. Agency theory provides strong support for hedging as a response to mismatch between managerial incentives and shareholder interests.

2.3.3 New Institutional Economics

A different perspective on risk management is offered by new institutional economics. The focus is shifted here to governance processes and socio-economic institutions that guide these processes, as explained by Williamson (1998). Although no empirical studies of new institutional economics approach to risk management have been carried out so far, the theory offers an alternative explanation of corporate behavior. Namely, it predicts that risk management practices may be determined by institutions or accepted practice within a market or industry. Moreover, the theory links security with specific assets purchase Williamson, (1987), which implies that risk management can be important in contracts which bind two sides without allowing diversification, such as large financing contract or close cooperation within a supply chain.

If institutional factors do play an important role in hedging, this should be observable in the data. First of all, there may be a difference between sectors. Secondly, hedging may be more popular in certain periods—in Poland one might venture a guess, that hedging should become more popular with years. A more concrete implication of this theory is that shareholders may be interested in attracting block ownership by reducing company risk. Here NIE is similar in its predictions to agency theory. However this theory also suggests that firm practices may be influenced by the ownership structure in general.

2.3.4 Stakeholder Theory

Stakeholder theory, developed originally by Freeman (1984) as a managerial instrument, has since evolved into a theory of the firm with high explanatory potential. Stakeholder theory focuses explicitly on equilibrium of stakeholder interests as the main determinant of corporate policy. The most promising contribution to risk management is the extension of implicit contracts theory from employment to other contracts, including sales and financing Cornell and Shapiro, (1987). To certain industries, particularly high-tech and services, consumer trust in the company being able to continue offering its services in the future can substantially contribute to company value. However, the value of these implicit claims is highly sensitive to expected costs of financial distress and bankruptcy. Since corporate risk management practices lead to a decrease in these expected costs, company value rises (Klimczak, (2005). Therefore stakeholder theory provides a new insight into possible rationale for risk management. However, it has not yet been tested directly. Investigations of financial distress hypothesis Smith and Stulz, (1995) provide only indirect evidence (e.g. Judge, 2006):

2.4 Determinants of Loan Defaults

2.4.1 Credit Risk Analysis

The five Cs of bad credit, representing things to guard against to help prevent problems are: complexity, carelessness, communication, contingencies and competition i.e. never to rely on the past so much, poor underwriting (inadequate loan documentation, lack of protective covenants in the loan agreement), credit objectives and policies are not clearly communicated, playing down or ignoring circumstances in which a loan might go bad (concentrating on a deal to work and not identifying risks and following competitors behaviour rather than maintaining the banks own credit standards Golden, Sam & Harry, (1993).

Once a customer requests a loan, bank officers analyze all available information to determine whether the loan meets the bank's risk- return objectives. Credit analysis is essentially default risk analysis in which a loan officer attempts to evaluate a borrower's ability and willingness to repay.

Traditionally, key risk factors have been classified according to the five Cs of good credit character, capital, capacity, conditions and collateral Scott & Timothy, (2006). In addition, ability and willingness of the borrower to repay debt outstanding is usually established by application of qualitative and quantitative models. Loan amortization (principal payments) should be reasonable when compared with the applicant's income and age. The loan officer should also consider monthly expenditures, family responsibilities and marital stability Anthony & Cornett, (2007).

Analysis- Analysis and presentation of a credit proposal

The analysis is consciously critical, looking for weak spots. If it identifies problems, the banker must put the problems in perspective, obtain additional information before presenting his case, suggest ways of lending which will reduce the risk or decide not to lend. (T.H. Donaldson). He further asserts that trust and communication between the analyst and the bankers are essential. The analysts enhance the effectiveness of the banker and improve credit control. Once a customer requests a loan, bank officers analyze all available information to determine whether the loan meets the bank's risk-return objectives Scott & Timothy, (2006). They go on to say that credit analysis is essentially default risk analysis in which a loan officer attempts to evaluate a banker's ability and willingness to pay. Traditionally, key risk factors have been classified according to the five C's of good character capital, capacity, capital, conditions and collateral.

While financial analysis of the loan applicant is important, other factors come into play. The quality of management is one of these factors Fred & Neil, (1985). Experience in the field and understanding of the business are key factors considered in the evaluation. A key question in all lending is how will the borrower repay? In commercial lending, the loan applicant's business plan is vital. It covers both the use of the loan proceeds and the plans for repayment. The business plan also provides evidence of how well management understands the business.

Important points a credit analysis should consider when appraisal a credit proposal

It would be unfair to state that banker's prefer only professionally managed companies or family managed companies. There are well managed, profitable companies in both these categories. There are also badly managed companies in both these categories. What then are the factors bankers look for?

The most important aspect is the integrity of management. This must be beyond question. It is often stated that however good the systems and controls are, an employee, if he is intent, can perpetrate a fraud. Similarly the management, if it so desires, can juggle figures and cause great harm and financial loss to a company (for their own personal gain). Bankers tend to if they are not too certain of the integrity of management will leave that company well alone. Thus the first thing an analyst should do when considering a loan is to check the competence, integrity and honesty of the management.

Another point analysts consider is proven competence-the past record of the management. How has the management managed the affairs of the company during the last few years? Has the company grown? Has it become more profitable? Has it grown more impressively than others in the same industry? Analysts are usually a little wary of new management and new companies as they have a very high level of mortality. This is why they normally ask for three to five years figures. Past performance can be an accurate predictor of future events.

Analysts often try to ascertain how highly the management is rated by its peers – by others in the same industry? This is a very telling factor. The one's that are aware of nearly all the strengths and weaknesses of the management are the competitors and if they hold the management in 'high esteem - the management is worthy of respect. At good times everyone does well. The steel of the management is tested at times of adversity? Analysts consider performance at a time of recession or depression. Did it streamline its operations? Did it close down its factories? Did it (if it could) get rid of employees? Was it able to sell its products? Did the company perform better that its

competitors? How did sales fare? A management that can steer its company in difficult times will normally do well always.

The depth of knowledge of the management - its knowledge of its products, its markets and the industry is of paramount importance because success of the company relies on this fact. Often the management of the company that has enjoyed a preeminent position sits back thinking that it will always be the dominant company and it loses its touch with its customers, its markets and its competitors. The reality sinks in only when it is too late. The management must be in touch at all times with the industry and customers and be aware of the latest techniques and innovations. Only then can it progress and keep ahead. A quick way bankers check this is by determining what the market share of the company's products are and whether the share is growing or is being maintained.

Analysts do not like to lend to a company that is yet to professionalise because in such companies decisions are made on the whims of the Chief Executive and not with the good of the company in mind. In such companies the most competent are not given the positions of power. There may be nepotism. Executives hold positions not due to proven competence but because of blood ties.

Bankers tend to avoid lending to family controlled companies where there is infighting because the companies suffer. In developing countries many of the larger Companies are family controlled. They are on a day to day basis managed however by professional managers. There are also several professionally managed companies too. It is not possible nor would it be fair to generalize which is better – some are good and some are not so good. An analyst, before he arrives at an opinion, makes a determination on whether he is comfortable with the management of the company and this is a determination that he makes because on this will determine his decision.

2.4.2 Changes in General Economic Conditions

Changes in general economic conditions and a firm's operating environment alter the cash flow available for debt service. These conditions are difficult to predict. Similarly,

an individual's ability to repay debts varies with changes in employment and personal net worth. For this reason, banks perform a credit analysis on each loan request to assess a borrower's capacity to repay Scott & Timothy, (2006). They further assert that these risks can be substantial, but are difficult to measure from published data. Conditions in the industry, community, general business environment are important in evaluation process. The risk of non-performing loans mainly arises as the external economic environment becomes worse off such as economic depressions Sinkey & Greenawalt, (1991).

2.4.3 Concentration of Loans in One Sector/Industry

A financial institution chooses its loan portfolio structure in light of its liability sources and customer needs. Most institutions specialize, to at least some degree in order to concentrate their lending activities in areas which they have a competitive advantage. Loans can be classified according to type of borrower, use of loan proceeds, type of security and maturity Fred & Neil, (1985). One reason banks sometimes specialize in lending to certain industries is that they have developed the necessary expertise to evaluate the quality of management in these industries.

2.4.4 Character

This is the probability that the loan applicant will try to honour the loan obligations Anthony & Cornett, (2007). They add that, character of the applicant is extremely important. Stability of residence, occupation, family status, previous history of savings and credit are frequently used in assessing character. Fred & Neil, (1985), comments on the above by saying it is the promptness in payment and honesty. Legal problems also can be a sign of lack of character.

2.5 Credit Cycle

The process of loan management involves seven steps: Loan product design, marketing, the credit decision, loan processing, account maintenance, collection and monitoring Fred & Neil, (1985).

2.6 Risk and Type of Risks

Risk is the potential that a chosen action or activity (including the choice of in action) will lead to a loss (an undesirable outcome). Potential losses themselves may also be called risks (Wikipedia).

Commercial Banks take deposits many times their capital and relend at a narrow margin above cost, which is turned into a satisfactory return on equity by the substantial gearing. Because a Commercial Bank is highly geared, the loss of 5 to 10% of its loan portfolio can wipe out its capital. The attitude to risk and risk control is conditioned by the fact that Commercial Banks are highly geared lenders (Donaldson, FCIB). There are different types of risk that commercial banks are exposed to namely: Credit risk, liquidity risk, interest rate risk, market risk, off balance sheet risk, foreign exchange risk, country or sovereign risk, technology risk, operational risk and insolvency risk Anthony & Cornett, (2007).

2.7 Stress Testing

In more practical terms, stress tests comprise a range of techniques aimed at quantifying the sensitivity of a portfolio to a range of 'extreme but plausible' events. The main outcome of a stress test is an estimate of the change in value of the portfolio when large variations in a set of financial variables (or risk factors) are assumed. In some cases, such an estimate may be a relatively accurate prediction of how risk exposures may change in value under stress conditions; more often, stress test results are only a rough approximation of what happens to a given portfolio in unfavorable conditions Mario Quagliariello, (2009).

Stress-testing is not a precise tool 'that can be used with scientific accuracy'; rather it is an art, which requires quantitative techniques, human judgment and a series of discretionary assumptions. When setting up the framework for stress-testing exercises, it is necessary to identify the kind of risks that have to be considered and the range of factors to be included. In the first place, stress tests can be used to analyse either the impact of changes in a single risk factor (e.g., a decline of equity prices) or the effect of a

multivariate scenario, where simultaneous changes in several risk factors are combined (e.g., a fall in gross domestic product (GDP) together with a decline of equity prices and a rise of interest rates). Jones et al (2004).

Stress-tests are particularly useful for risk monitoring and assessment as they make it possible to quantify the likely impact of shocks, which helps to rank risks by their importance and allows assessment and surveillance to be more focused. Moreover, stress-tests can help provide early warning signals and thus contribute to the forward-looking dimension of financial stability monitoring and assessment. L. Papademos, Conference on 'Simulating financial instability: stress-testing and financial crisis simulation exercises', European Central Bank, Frankfurt am Main, (2007).

2.8 Credit Rating/scoring

One of the most innovative aspects of the Basel II accord is the internal rating based approach for measurement of capital requirement for credit risk. This approach involves assigning weights based on the internal rating of the borrowers. The rating exercise must fulfill certain criteria to the satisfaction of the regulator Indian Institute of Banking & Finance, (2005). They further state that the salient features of an Internal Risk based approach are PD, LGD, ED and M.

A well-structured credit risk grading system is an important tool in differentiating the degree of credit risk in the various credit exposures of a bank. This allows a more accurate determination of the overall characteristics of the loan portfolio, probability of default and ultimately the adequacy of provisions for loan losses. In describing a credit risk grading system, a bank should address the definitions of each credit risk grade and the delineation of responsibilities for the design, implementation, operation and performance of the system Basel Committee, (2005). Credit scoring is preferred to judgment. It consists of assigning points according to characteristics and then granting credit if the borrower meets the lenders minimum point standards Fred & Neil, (1985).

Anthony & Cornetts, (2007), define credit scoring as a mathematical model that uses observed loan applicants characteristics to calculate a score that represents the applicants probability of default (versus repayment). They are developed using borrower's characteristics e.g. income, age, loan payment history for some past period. The applicant's total score must be above the boundary score or range to be considered acceptable for a loan. They further assert Credit risk grading systems typically take into account a borrower's current financial condition and paying capacity, the current value and realisability of collateral and other borrower and facility specific characteristics that affect the prospects for collection of principal and interest. Because these characteristics are not used solely for one purpose (e.g. credit risk or financial reporting), a bank may assign a single credit risk grade to a loan regardless of the purpose for which the grading is used.

In addition, Credit risk ratings should be reviewed and updated whenever relevant new information is received. Loans to which credit risk grades are assigned should receive a periodic formal review (eg at least annually) to reasonably assure that those grades are accurate and up-to-date. Credit risk grades for individually assessed loans that are either large, complex, higher risk or problem credits should be reviewed more frequently.

2.9 Asset Classification and Provisioning policy

An NPA causes two fold impact on the profitability of a bank. On one hand, the bank ceases to earn interest on this asset and the bank is required to make provisions for this asset, depending on the classification/category of the asset and value of security, if any Indian Institute of Banking & Finance, (2005).

The provisioning policy represents management's estimates of the potential incremental lost revenue from bad loans and is a deduction from income. It represents a bank's periodic allocation to its loan and lease loss allowance (loan loss reserve) on the balance sheet Scott & Timothy, (2006). Assets should be classified into four broad categories and provisioning should be done based on the classification of assets namely Standard assets, sub-standard assets, doubtful assets and loss assets An asset becomes non-performing

when it ceases to generate income for the Bank. An advance is classified as an NPA where: Interest or installment remains overdue for more than 90 days in respect of a Term Loan, the account remains out of order in respect of an Overdraft/Cash credit for more than 90 days, a bill remains overdue for more than 90 days in case of a bill purchased/discounted, any amount to be received remains overdue for more than 90 days. In summary a standard asset is not an NPA, an asset becomes substandard when it is overdue for 12 months after becoming an NPA, doubtful asset is a sub standard asset for more than 12 months or more and loss asset becomes uncollectible/unrealizable Indian Institute of Banking & Finance, (2005).

2.10 Credit Risk Mitigation Techniques

Institutions use various techniques of mitigating credit risk. The most common are collateral, guarantees and netting off of loans against deposits of the same counter-party. While the use of these techniques will reduce or transfer credit risk, other risks may arise which include legal, operational, liquidity and market risks. Therefore there is a need for a bank to have stringent procedures and processes to control these risks and have them well documented in the policies. At present, in this jurisdiction, the common credit risk mitigation technique used is collateral.

A collateralised transaction is one in which institutions have a credit exposure or potential credit exposure and the exposure is reduced in whole or in part. The following is essential: There must be legal certainty. All documentation used for collateralised lending must be binding to all parties and also be legally enforceable, the legal environment must provide for right of liquidation or right of possession in a timely manner in the event of default, necessary steps must be taken for obtaining and maintaining an enforceable security, for example registration, right of set-off or transfer of title must meet all the legal requirements., procedures for timely liquidation of collateral should be in place, on going valuations of the collateral should be undertaken to confirm that it remains realizable and guidance on the various acceptable forms of collateral should be documented.

The institution should primarily assess the borrower's capacity to repay and should not use collateral to compensate for insufficient information. An institution may utilise collateral and guarantees, among other instruments, to help mitigate credit risks. However, collateral and guarantees should not be used as a substitute, either for comprehensive assessment of the obligor or for complete obligor information. The potential correlation between collateral values and the obligor's financial condition should also be considered, especially in asset-based lending. Specific proportions of financing should be established for different types of collateral. The quantum should be set at a level that provides sufficient cushion against a decline in collateral values. There should be periodic reviews to assess the value of the collateral and the appropriateness of the lending margin. An institution should exercise caution when extending credit against illiquid assets.

When accepting guarantees for credit facilities, an institution should evaluate the level of coverage being provided in relation to the credit quality, legal capacity and strength of the guarantor. The institution should differentiate between explicit guarantees and implicit ones (e.g. anticipated support from the government). If implicit guarantees are taken into account, they must be adequately justified. The institution should ensure the enforceability of guarantee agreements Monetary Authority of Singapore, (2006).

All banks take into account facility characteristics such as third-party guarantees, collateral, and seniority/subordination of the obligation in making lending decisions and more generally in their credit risk mitigation processes. Moreover, in nearly all cases facility characteristics are (at least to some extent) also explicitly considered in assessing the credit quality of an exposure and/or analysing internal profitability or capital allocations. Mostly, guarantees are allowed to affect the rating by effectively transferring the risk to the guarantor or, alternatively, using the more favourable of the borrower or guarantor rating Basel Committee, (2001).

Collateral is generally also considered as an input in reducing the severity of the loss and thus in improving facility ratings, although in a few cases it reduces the exposure rather than alter the rating. The survey revealed that banks take account of a wide range of both financial (e.g. marketable securities) and physical (e.g. real estate) forms of security. Banks providing facility grades generally do not consider the liquidity of the instrument being rated in assigning that grade, although in some cases the liquidity of collateral (and implications for its value) are considered explicitly Basel Committee, (2001).

2.11 Management of Problem Credits

The credit policy should establish the procedures for dealing with deteriorating and managing problem credits. Early recognition of weaknesses in the credit portfolio is important and allows alternative action and for an effective determination of loan loss potential. An institution must have clearly articulated and documented policies in respect of the counting of days past due. In particular, relating to granting extensions, deferrals, renewals and additional credits to existing accounts. At a minimum it must have approval levels and reporting requirements in respect of the above. The policy should define a follow-up procedure for all loans and the various reports to be submitted both to management and board of directors. It should also include the internal rating for loan classification and provisioning.

2.12 Monitoring the Loan Portfolio

Continual monitoring of the quality of the loan portfolio is important to ensure profitability and control of risk. Undue concentration in one area or industry leaves the lender exposed to wholesale defaults if economic difficulties develop Fred & Neil, (1985). Beyond adherence to policy, managers are interested in trends in loan portfolio performance, including both profitability and safety. The quality of loan portfolio can be monitored by: delinquency rate, NPLs, charge-offs as a percentage of loans, recoveries as a percentage of the prior years charge-offs, loan loss coverage and loan loss reserves as a percentage of loans.

2.13 Monitoring Credit Risk

The credit risk monitoring system provides the relevant information for senior management to make its experienced judgements about the credit quality of the loan portfolio and provides the foundation upon which a bank's loan loss or provisioning methodology is built. That is, the same information should be utilised by senior management to monitor the condition of the loan portfolio and in the bank's methodology for determining amounts of loan loss provisions for credit risk assessment, accounting and capital adequacy purposes Basel Committee, (2005).

As described above, a bank's credit risk monitoring system should meet fundamental requirements and procedures including the appropriate tools to assess credit risk accurately. These fundamental requirements, procedures and tools are equally necessary for assessment of credit risk, accounting and consideration for regulatory capital adequacy purposes. Accordingly, these fundamentals serve as common elements in assessing credit risk for all three purposes. Generally, common types of data that are used in assessment and valuation processes include credit risk grades, historical loss rates, characteristics used to group loans for collective assessment and observable data used to estimate credit losses or to adjust historical loss rates.

Monitoring of credit risk is not an easy task as observed below, "It is one thing to make sound loans, quite another to ensure they remain sound over long periods. A part from specific loans, the overall quality of the portfolio, of the decisions and of the way in which they are carried out must be monitored Donaldson, (1988). For effective credit risk monitoring, it is important to have an internal risk rating system. This comprises all the methods, processes, controls, data collection and IT systems that support the assessment of credit risk ratings, and the quantification of default and loss estimates. An institution can utilize multiple rating methodologies/systems for each class of asset.

Internal rating systems are therefore an important tool in monitoring and controlling credit risk. They ensure early identification of potential or actual deterioration in credit risk. It is also important for the board and senior management to receive periodic reports

on the condition of the portfolios based on the internal ratings. Therefore, an effective monitoring system will ensure that the bank, understands the current financial condition of the borrower, monitors compliance with the existing terms and conditions, assesses collateral in relation to the borrowers current conditions and identifies non-performing accounts and enforces proper classification and loan loss provisioning. The bank should also assign specific individuals for monitoring the credit portfolio including ensuring information is disseminated to those responsible for taking corrective action and assigning adequate reserves for loan losses.

In addition to the above, the institution should undertake a detailed credit portfolio review to include the following: All loans to borrowers with aggregate exposure larger than 10 percent of the institution's capital, all loans to shareholders and connected parties., all loans for which interest or repayment terms have been rescheduled or otherwise altered since the granting of the loan, all loans for which cash payment of interest and / or principal is more than 30, 60, 90 and 180 days past due, including those for which interest has been capitalized or rolled over and all loans classified as substandard, doubtful or loss. The specific objective of these reviews is to assess the likelihood that the credit will be repaid and the classification of the loan is adequate. When the amount exceeds 10% of a bank's capital, the analysis should also consider the borrower's business plans for the future and the potential consequences for debt service capacity and principal repayment.

2.14 Internal Controls and Audit

Institutions should have in place an independent internal system for assessment of the credit risk management process. This function is necessary in order to independently enable the board determine whether the risk management process is working effectively. The results of these audits should be communicated promptly to the directors and senior management. The review should provide sufficient information to the board and management to enable them evaluate accurately performance and condition of the portfolio. The credit review function should report directly to the board of directors or a board's audit committee.

A review of the lending process should include analysis of the credit manuals and other written guidelines applied by various departments of a bank, and the capacity and actual performance of all departments involved in the credit function. It should also cover origination, appraisal, approval, disbursement, monitoring, collection and handling procedures for the various credit functions provided by the institution. The internal audit review team should ensure compliance with the institution's credit policies and procedures. This will require confirming the following: The credit granting function is carried out effectively, the credit exposures are within the prudential and internal limits set by the board of directors, validation of significant change in the risk management process, verification of the consistency, timeliness and reliability of data used for internal risk rating system, adherence to internal risk rating system, identification of areas of weaknesses in the credit risk management process and exceptions to the policies, procedures and limits. The internal audit should be conducted on a periodic basis and ideally not less than once a year. The audits should also identify weaknesses in the credit risk management process and any deficiencies with the policies and procedures.

2.15 The Power to Approve Credit

It is paramount for banks to assign specific powers to specific individuals or groups based on their expertise when approving or granting credit. As pointed out by Donaldson, (1988), there are four ways to allocate power to approve Credit. Many banks use a mixture of two or more: A credit committee which can be anything from a group of specialist to the main board or management committee, temporarily switching hats, senior specialists, whose duties are entirely related to credit. They may be confined to making credit decisions or include credit control and administration, senior general lenders whose authority arises from their overall seniority and function and devolved authority (sometimes referred to as the ladder method).

Senior Management

The senior management has the responsibility of implementing the credit strategy approved by the board of directors and developing policies and procedures for effective management of the credit risk. The senior management should ensure the following: The

credit granting activities conform to the laid down strategy, written procedures have been developed, implemented and responsibilities of the various functions are clearly defined, compliance with internal exposure limits, prudential limits and regulatory requirements, the credit policies must be communicated throughout the institution, implemented, monitored and revised periodically to address any changes, internal audit reviews of the credit risk management system and credit portfolio are undertaken regularly and adequate research is undertaken for any new products or activities to ensure the risks are appropriately identified and managed. These products must receive prior board approval.

2.16 Risk Management Structure

The primary responsibility of understanding the risks run by a financial institution and ensuring that the risks are appropriately managed should clearly be vested with the board of directors. The board should set limits by assessing the financial institution's risk and risk-bearing capacity. At the organizational level, overall risk management should be assigned to a Risk Management Committee or an independent Risk Manager that reports directly to the board. The Risk Manager must sufficiently be independent of the business lines in order to ensure an adequate separation of duties and the avoidance of conflicts of interest.

The Risk Management Committee or the Risk Manager shall take full responsibility for evaluating the overall risks faced by the financial institution and determining the level of risks that will be in the best interest of the financial institution. The functions of the Risk Management Committee or Risk Manager should essentially be to identify, measure, monitor and control the risks undertaken by a financial institution.

2.17 Comprehensive Risk Management Programme

No single risk management system works for all financial institutions. For this reason, the Central Bank of Kenya requires each financial institution to develop its own comprehensive Risk Management Programme (RMP) tailored to its needs and circumstances. This Risk Management Programme, however, should at least cover the

most common risks, as follows: Strategic Risk, Credit Risk, Liquidity Risk, Interest Rate Risk, Foreign Exchange Risk, Price Risk/Market risk, Operational Risk, Regulatory Risk. Regardless of the Risk Management Programme design, each programme should include the basic elements of a sound risk management system:

(a) Risk Identification: In order to manage risks, risks must first be identified. Almost every product and service offered by financial institutions has a unique risk profile composed of multiple risks. For example, at least four types of risks are usually present in most loans: credit risk, interest rate risk, liquidity risk and operational risk. Risk identification should be a continuing process and risk should be understood at both the transaction and portfolio levels.

(b) Risk Measurement: Once the risks associated with a particular activity have been identified, the next step is to measure the significance of each risk. Each risk should be viewed in terms of its three dimensions: size, duration and probability of adverse occurrences. Accurate and timely measurement of risk is essential to effective risk management systems.

(c) Risk Control: Once risks have been identified and measured for significance, there are basically three ways to control significant risks, or at least minimize their adverse consequences: avoiding or placing limits on certain activities/risks, mitigating risks and/or offsetting risks. It is a primary management function to balance expected rewards against risks and the expenses associated with controlling risks. Financial institutions should establish and communicate risk limits through policies, standards and procedures that define responsibility and authority.

(d) Risk Monitoring: Financial institutions need to establish a Management Information System (MIS) that accurately identifies and measures risks at the inception of transactions and activities. A loan payment delinquency report reflecting loans that are not paying as agreed is one report that indicates possible changes in perceived risk profiles. Since many financial institutions depend heavily on their net interest margins for survival, an MIS that reflects the impact of changes in interest rate risk is very important. In general, monitoring risks means developing reporting systems that identify adverse changes in the risk profiles of significant products, services and activities and monitoring changes in controls that have been put in place to minimize adverse consequences.

2.18 Empirical Studies

In another study by Ngare (2008), credit risk management practices by commercial banks were sought. This was a survey of commercial banks in Kenya. The results revealed a combination of credit risk management methods used by commercial banks in Kenya. Njiru (2003) did a study on credit risk management by coffee cooperatives in Embu District. The study was a survey of coffee cooperatives in the area. The study revealed that the methods were similar to the ones commonly espoused in finance textbooks. Simiyu (2008) on the other hand sought to establish the credit risk management techniques in microfinance institutions in Kenya. The study design was survey of microfinance institutions in Nairobi. The study revealed that the methods did not differ from those of commercial banks. Lastly, Weru (2008) did an assessment of information systems risk management practices. This was a case study. The study revealed that the organization used various information system risk management strategies as recommended by COSO framework.

Kioko (2008) did a study on the credit risk management techniques of unsecured loans of Commercial Banks in Kenya. The study was a survey of various Commercial Banks. The study revealed that the Banks used a combination of credit management methods for unsecured loans. Further, Kipchichir (2008) did a study on foreign exchange risk management practices. The study was a survey of the motor vehicle industry in Kenya. The results revealed that the most commonly used foreign exchange risk management method was hedging.

Al-Tamini and Al-Mazrooei (2007) sought to examine the degree to which the UAE banks use risk management practices and techniques in dealing with different types of risk. The secondary objective was to compare risk management practices between the two sets of banks. The authors developed a modified questionnaire, divided into two parts. The first part covered six aspects: understanding risk and risk management; risk identification; risk assessment and analysis; risk monitoring; risk management practices; and credit risk analysis. This part included 43 closed-ended questions based on an interval scale.

The second part consisted of two closed-ended questions based on an ordinal scale dealing with two topics: methods of risk identification, and risks facing the sample banks. The study found that the three most important types of risk facing the UAE commercial banks were foreign exchange risk, followed by credit risk, then operating risk. It was also found that the UAE banks were somewhat efficient in managing risk, and risk identification and risk assessment and analysis were the most influencing variables in risk management practices. Finally, the results indicated that there was a significant difference between the UAE national and foreign banks in the practice of risk assessment and analysis, and in risk monitoring and controlling.

2.19 Conclusion

In the Kenyan context, many publications throw light over the Risk management strategies adopted by Commercial Banks in Kenya. However these studies don't depict any empirical relationship between rising levels of NPLs and their determinants. The purpose of this study is to study the correlation of determinants of NPLs in Commercial Banks in Kenya applicable in Kenyan context. This study also establishes whether banks in Kenya use the strategies laid down the regulator and other International bodies like the Basel Committee.

In summary, a Risk Management Department/Team should be able to: Develop, adapt and maintain risk management policy, monitor and report portfolio exposure and risk concentrations, provide independent analysis of risks, develop & maintain risk reporting systems, develop Risk quantification methods, assistance in understanding the risk, its measurement, and control methodology, assistance in reviewing of policies, strategies, plans, coordinate the corporate Disaster recovery & Business Continuity Programme, prepare reports for the Board on the Bank's risk profile and changes therein and identify and adopt global best practices.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research design and methodology of the study; it highlights a full description of the research design, the research variables and provides a broad view of the description and selection of the population. The research instruments, data collection techniques and data analysis procedure have also been pointed out.

3.2 Research Design

The research design used was descriptive survey design. The dependent variable was NPLs and the independent variables were Economic conditions, Credit analysis, character and climatic conditions.

3.3 Target Population

The population of the study was all commercial banks in Nairobi region. There are 44 commercial banks in Kenya. The target population of this study will be all the commercial banks in Kenya.

3.4 Data Collection

The primary data will be collected using structured questionnaire. The questionnaires will provide a more comprehensive view than any other research tool. The questionnaires will include structured and unstructured questions and will be administered through drop and pick method to two credit officers for each banks. Structured questions will be used in an effort to conserve time and money and to facilitate easier analysis while the unstructured questions will be used to encourage the respondents to give an in-depth and felt responses without holding back in giving of information.

3.5 Data Analysis

The research will be both quantitative and qualitative in nature. Data will be analyzed through the Statistical Package for Social Sciences (SPSS) package version 17. Data shall be analysed using descriptive statistics such as frequency tables and percentages. The analysis shall be on the cause of NPLs in Commercial Banks and ranked according to severity. Qualitative data from open questions will be presented in prose form. To achieve the objectives of this study, models will be developed using causes as independent variables and NPLs levels as dependent variable. The extent to which NPLs have increased in Commercial banks and their causes will be analysed using regression analysis. The dependent variable will be NPLs while the independent variable(s) will be causes of NPLs measured using the mean scores from the questionnaires from each of the banks.

Conceptual Model

$$\text{NPL} = f(X_1 + X_2 + X_3) \dots\dots\dots \text{Eq (i)}$$

Where X_1 = Economic variables

X_2 = Character/behavioural variables

X_3 = Credit Analysis

Analytical Model

This is derived from the conceptual model depicted in equation (i) above

$$\text{NPL} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$$

Where

$\beta_1 X_1$, = Economic variables

$\beta_2 X_2$, = Character/behavioural variables

$\beta_3 X_3$, = Credit Analysis

The above variables will be measured as follows:-

Inflation will be measured by the rate of interest over the past six months. Income will be measured in Kshs using client's pay slips at the time of loan applications. Interest rates will be measured by the percentage increase in bank's lending rates. Political influence measured qualitatively in prose form. Climatic conditions will be measured by the performance sector wise from the reports to CBK like Business Statistics Monthly (BSM). Credit analysis be measured by the number of loan applications declined versus total loan applications received daily, weekly and monthly. Loan tenure will be measured by the number of years taken to repay a loan. Staff turnover will be measured by the number of staff who resign or are dismissed monthly against the total number of staff as a percentage. Character is a construct which will be measured qualitatively in prose form. Earnings will be measured by Return on Assets (ROA) and Return on Equity (ROE). Capital Adequacy will be measured by Capital Adequacy ratio (CAR) which is a bank's core capital expressed as a percentage of its assets weighted exposure. Asset quality values will be extracted from the financial statements (shows quality of bank loans since interest earnings contributes to almost 70% of the bank's earnings).

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Results and Findings

The general objective of the study was to establish the relationship between determinants on one hand and non-performing loans on the other commercial banks in Kenya.

4.2 General Information

The general information sought in the study included respondents; gender, whether the bank's loan book contains NPLs, length taken to review policies related to NPLS, percentage of NPLs in a bank's loan book and measures taken to reduce on risks affecting banks.

Current level of NPL

Table 4.1: Level of NPLs

Level of NPLs	Frequency	Percent	Valid Percent	Cumulative Percent
2%	6	30.0	30.0	30.0
3%	7	35.0	35.0	65.0
4%	6	30.0	30.0	95.0
5%	1	5.0	5.0	100.0
Total	20	100.0	100.0	

Source: Author computation 2011

From the findings as shown by Table 4.1, 30% of the respondents indicated that the level of NPLs in their bank is 2% and 4%, 35% said it is 3%, 5% said it is 5%. This indicates that the level of NPLs in the banks is averagely 2-4%.

Table 4.2: Factors causing loan defaults

Factor	Frequency	Percent	Valid Percent	Cumulative Percent
CHANGE IN ECONOMIC ENVIRONMENT	15	75.0	75.0	75.0
LOSSES IN BUSINESS	2	10.0	10.0	85.0
BUSINESS FAILURE	3	15.0	15.0	100.0
Total	20	100.0	100.0	

Factor	Frequency	Percent	Valid Percent	Cumulative Percent
LOSSES IN BUSINESS	9	45.0	50.0	50.0
BUSINESS FAILURE	8	40.0	44.4	94.4
LACK OF ACCESS TO CUSTOMER INFORMATION	1	5.0	5.6	100.0
Total	18	90.0	100.0	
System	2	10.0		
Total	20	100.0		

Factor	Frequency	Percent	Valid Percent	Cumulative Percent
LOSS IN JOB	7	35.0	38.9	38.9
BUSINESS FAILURE	2	10.0	11.1	50.0
POOR CREDIT ANALYSIS	4	20.0	22.2	72.2
LACK OF ACCESS TO CUSTOMER INFORMATION	4	20.0	22.2	94.4
POLITICAL INFLUENCE	1	5.0	5.6	100.0
Total	18	90.0	100.0	
System	2	10.0		
Total	20	100.0		

	Factor	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BUSINESS FAILURE	7	35.0	58.3	58.3
	LACK OF ACCESS TO CUSTOMER INFORMATION	2	10.0	16.7	75.0
	LEGAL ISSUES	3	15.0	25.0	100.0
	Total	12	60.0	100.0	
Missing	System	8	40.0		
	Total	20	100.0		

	Factor	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	POOR CREDIT ANALYSIS	7	35.0	100.0	100.0
Missing	System	13	65.0		
	Total	20	100.0		



Factor		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LACK OF ACCESS TO CUSTOMER INFORMATION	7	35.0	100.0	100.0
Missing	System	13	65.0		
	Total	20	100.0		

Factor		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	POLITICAL INFLUENCE	7	35.0	100.0	100.0
Missing	System	13	65.0		
	Total	20	100.0		

Factor		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LACK OF COMMITMENT	5	25.0	100.0	100.0
Missing	System	15	75.0		
	Total	20	100.0		

Source: Author computation 2011

From the findings as shown by Table 4.2, 75% of the respondents indicated that change in economic environment is the highest cause of loan defaults followed by losses in business at 45%. Lack of commitment was lowest at 25%.

Table 4.3: Influence of climate change on NPLs

DOES CHANGE IN CLIMATE INFLUENCE NPLS

Influence of climatic change on NPLs		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	18	90.0	90.0	90.0
	NO	2	10.0	10.0	100.0
	Total	20	100.0	100.0	

Source: Author computation 2011

In addition the sector that is most affected by change in climatic condition is agriculture at 90% followed by manufacturing at 25%. The least affected by climatic change is mining sector.

Table 4.4: Increase in the rate of interest rates over the last 6 months

Increase of rate of interest		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	19	95.0	100.0	100.0
Missing	System	1	5.0		
	Total	20	100.0		

All the respondents (100%) agreed that there has been an increase in the rate of interest rates for the past 6 months.

BY WHAT % HAVE THE RATES INCREASED

Percentage increase in rate of interest		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-1%	3	15.0	15.0	15.0
	2-5%	15	75.0	75.0	90.0
	OVER 5%	2	10.0	10.0	100.0
	Total	20	100.0	100.0	

Source: Author computation 2011

The findings on the percentage increase in rate of interest shows that 75% of the respondents agreed that the rate of interest have increased at between 2-5%. From these findings we can deduce that increase in the rate of interest have contributed to increase in loan defaults.

Table 4.5 Loan tenure versus rate of default

DOES THE LOAN TENURE/REPAYMENT PERIOD AFFECT THE RATE OF DEFAULT

Loan tenure versus rate of default		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	18	90.0	90.0	90.0
	NO	2	10.0	10.0	100.0
	Total	20	100.0	100.0	

Source: Author computation 2011

Table 4.6: Loan defaults versus loan tenure**BETWEEN WHICH REPAYMENT PERIOD DO LOAN DEFAULTS OCCUR MORE**

Repayment period versus loan defaults		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LESS THAN 1 YEAR	7	35.0	35.0	35.0
	5-10 YEARS	6	30.0	30.0	65.0
	MORE THAN 10 YEARS	7	35.0	35.0	100.0
	Total	20	100.0	100.0	

Source: Author computation 2011

From the findings as shown by Table 4.6, majority of the respondents (90%) indicated that loan tenure has an effect on loan defaults and also high default rate is experienced of loans of more than ten years at 35%. This shows that the longer the loan tenure the higher the default rate.

Table 4.7 Risk assessment methods/management used at your bank**SELF-JUDGEMENT**

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEUTRAL	8	40.0	40.0	40.0
	METHOD MORE USED	5	25.0	25.0	65.0
	METHOD MOST USED	7	35.0	35.0	100.0
	Total	20	100.0	100.0	

STATISTICAL METHOD

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	METHOD MORE USED	6	30.0	30.0	30.0
	METHOD MOST USED	14	70.0	70.0	100.0
	Total	20	100.0	100.0	

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	METHOD LEAST USED	2	10.0	11.1	11.1
	METHOD LESS USED	6	30.0	33.3	44.4
	NEUTRAL	6	30.0	33.3	77.8
	METHOD MORE USED	2	10.0	11.1	88.9
	METHOD MOST USED	2	10.0	11.1	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
	Total	20	100.0		

Source: Author computation 2011

On the methods most used for credit assessment, statistical method is the most used at 70%, self-judgment at 25%, CRB at 10% and 5 % to others.

Table 4.8: Methods considered as able to reduce loan defaults

		CRB			
Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LESS IMPORTANT	4	20.0	23.5	23.5
	NEUTRAL	5	25.0	29.4	52.9
	IMPORTANT	2	10.0	11.8	64.7
	MOST IMPORTANT	6	30.0	35.3	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
	Total	20	100.0		

		GOOD CREDIT ANALYSIS			
Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MOST IMPORTANT	17	85.0	100.0	100.0
Missing	System	3	15.0		
	Total	20	100.0		

		GOOD LOAN AGREEMENT			
Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEUTRAL	4	20.0	23.5	23.5
	IMPORTANT	11	55.0	64.7	88.2
	MOST IMPORTANT	2	10.0	11.8	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
	Total	20	100.0		

Source: Author computation 2011

Form Table 4.8 above, a majority of the respondents agree that the most method considered as able to reduce loan defaults is good credit analysis at 85%.

Are There Approved Limits Given To Specific People or Group of People

Table 4.9 Approving Powers/Limits

Does approving powers exist at your bank		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	17	85.0	100.0	100.0
Missing	System	3	15.0		
	Total	20	100.0		

Source: Author computation 2011

The findings in figure 4.9 above show that all banks (85% of the respondents) have limits given to specific people to approve credit. Most approving powers are given to the top management being the senior management and the board.

Table 4.10: How important are the following risks to your bank

CREDIT RISK

Risk importance		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	IMPORTANT	4	20.0	23.5	23.5
	MOST IMPORTANT	13	65.0	76.5	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
	Total	20	100.0		

LIQUIDITY RISK

Risk importance		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	IMPORTANT	7	35.0	41.2	41.2
	MOST IMPORTANT	10	50.0	58.8	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
	Total	20	100.0		

MARKET RISK

Risk importance		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEUTRAL	2	10.0	11.8	11.8
	IMPORTANT	11	55.0	64.7	76.5
	MOST IMPORTANT	4	20.0	23.5	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
	Total	20	100.0		

OPERATIONAL RISK

Risk importance		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEUTRAL	2	10.0	13.3	13.3
	IMPORTANT	7	35.0	46.7	60.0
	MOST IMPORTANT	6	30.0	40.0	100.0
	Total	15	75.0	100.0	
Missing	System	5	25.0		
	Total	20	100.0		

SOVEREIGN RISK

Risk importance		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LEAST IMPORTANT	2	10.0	11.8	11.8
	LESS IMPORTANT	6	30.0	35.3	47.1
	NEUTRAL	7	35.0	41.2	88.2
	MOST IMPORTANT	2	10.0	11.8	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
	Total	20	100.0		

INTEREST RATE RISK

Risk importance		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEUTRAL	4	20.0	23.5	23.5
	MOST IMPORTANT	13	65.0	76.5	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
	Total	20	100.0		

TECHNOLOGY RISK

Risk importance		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LEAST IMPORTANT	4	20.0	23.5	23.5
	IMPORTANT	4	20.0	23.5	47.1
	MOST IMPORTANT	9	45.0	52.9	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
	Total	20	100.0		

Source: Author computation 2011

From the Table 4.10 above, most respondents agree that the most important risk affecting their banks is credit risk at 76.5% followed by Liquidity risk at 58.8%. Sovereign risk has less or no effect at all.

Table 4.11: Methods used to guard against the risks

FUTURES

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LEAST USED	4	20.0	40.0	40.0
	NEUTRAL	2	10.0	20.0	60.0
	USED	2	10.0	20.0	80.0
	MOST USED	2	10.0	20.0	100.0
	Total	10	50.0	100.0	
Missing	System	10	50.0		
	Total	20	100.0		

OPTIONS

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LEAST USED	4	20.0	40.0	40.0
	NEUTRAL	2	10.0	20.0	60.0
	USED	2	10.0	20.0	80.0
	MOST USED	2	10.0	20.0	100.0
	Total	10	50.0	100.0	
Missing	System	10	50.0		
	Total	20	100.0		

FORWARDS

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LEAST USED	4	20.0	40.0	40.0
	NEUTRAL	2	10.0	20.0	60.0
	USED	2	10.0	20.0	80.0
	MOST USED	2	10.0	20.0	100.0
	Total	10	50.0	100.0	
Missing	System	10	50.0		
	Total	20	100.0		

DIVERSIFICATION

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEUTRAL	2	10.0	13.3	13.3
	USED	2	10.0	13.3	26.7
	MOST USED	11	55.0	73.3	100.0
	Total	15	75.0	100.0	
Missing	System	5	25.0		
	Total	20	100.0		

POWERS TO APPROVE CREDIT

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEUTRAL	2	10.0	11.8	11.8
	USED	6	30.0	35.3	47.1
	MOST USED	9	45.0	52.9	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
	Total	20	100.0		

MATURITY LADDERING

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LEAST USED	2	10.0	11.8	11.8
	NEUTRAL	6	30.0	35.3	47.1
	USED	3	15.0	17.6	64.7
	MOST USED	6	30.0	35.3	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
	Total	20	100.0		

Source: Author computation 2011

Table 4.11 above shows the method most used to guard against the above named risks is diversification at 73.3% followed by powers to approve credit at 52.9% and maturity laddering at 35.3%.

Table 4.12: Factors that have impacted on the financial performance of your bank

IMPROVED CREDIT APPRAISAL

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEUTRAL	2	10.0	13.3	13.3
	USED	9	45.0	60.0	73.3
	MOST USED	4	20.0	26.7	100.0
	Total	15	75.0	100.0	
Missing	System	5	25.0		
	Total	20	100.0		

STAFF TURN OVER

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LESS USED	3	15.0	23.1	23.1
	NEUTRAL	10	50.0	76.9	100.0
	Total	13	65.0	100.0	
Missing	System	7	35.0		
	Total	20	100.0		

LOAN DEFAULTS

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LESS USED	2	10.0	15.4	15.4
	NEUTRAL	2	10.0	15.4	30.8
	USED	2	10.0	15.4	46.2
	MOST USED	7	35.0	53.8	100.0
	Total	13	65.0	100.0	
Missing	System	7	35.0		
	Total	20	100.0		

Source: Author computation 2011

FRAUDS

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LESS USED	4	20.0	30.8	30.8
	NEUTRAL	7	35.0	53.8	84.6
	MOST USED	2	10.0	15.4	100.0
	Total	13	65.0	100.0	
Missing	System	7	35.0		
	Total	20	100.0		

LACK OF SKILLED MANPOWER

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LEAST USED	7	35.0	53.8	53.8
	LESS USED	4	20.0	30.8	84.6
	NEUTRAL	2	10.0	15.4	100.0
	Total	13	65.0	100.0	
Missing	System	7	35.0		
	Total	20	100.0		

COMPETITION

Response		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LESS USED	2	10.0	15.4	15.4
	USED	11	55.0	84.6	100.0
	Total	13	65.0	100.0	
Missing	System	7	35.0		
	Total	20	100.0		

Source: Author computation 2011

From table 4.12 above, competition has been sighted as the most factor that has impacted on the financial performance of the banks at 84.6% followed by loan defaults at 53.8%.

4.3 Discussion

4.3.1 What can be done to Reduce Loan Defaults

The findings revealed that most of the credit officers agree that the loan book at their bank consisted of NPLs and this affects the financial performance of the banks directly. Consumer education can reduce loan default to a large or very large extent. By implication, the findings emphasize consumer centric approach to marketing practice

argued to benefit the banks then loan diversion is reduced. While the ultimate responsibility for this task falls on the loanee, this study agrees with previous scholars that creditors clearly require help in understanding the nature of loan defaults, its consequences, and ways to overcome it, if not avoid it altogether. The linkages already established between certain demographic factors and loanees have clear applications for communication programs designed to serve consumers of credit. All participants – consumers, general public and banks stand to gain, and their involvement is necessary in curbing loan defaults. Counseling programs would also influence loan defaults to a large extent as perceived by credit officers. Targeted counseling programs would help loanees who are at greater risk for building higher levels debt, especially for those who are also high in concern with immediate consequences of their actions.

The study findings revealed that monitoring credit standing can reduce loan defaults to a large extent according to majority of the credit officers. This reinforces previous study findings which established that credit counseling improved consumers' financial behavior. It agrees with financial literature validated by a series of studies which found that consumers who are financially knowledgeable are more likely to behave in financially responsible ways. The credit officers also observed that due diligence can help reduce loan default to a large extent. Due diligence would help credit officers to identify high-risk consumers at the earliest stage possible. In addition, effective due diligence systems such as knowing customers and being alert to unusual use of funds as a result of diversion are also fundamental to help ensure compliance with activity reporting regulations.

As the study found out, general financial awareness campaign targeted on the loanee can also go along way in reducing loan defaults. Further, credit officers in this study felt that stiffer regulation by central bank can help reduce loan defaults to a small extent if at all. This is unsurprising as previous studies have established that according to the perspective of bankers, further regulations will seriously harm the profitability of the banks. However, this argument by itself should not warrant wholesome dismissal of the role of regulation in mitigating loan default risks.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter begins with a summary of the study. It then discusses the study findings, draws conclusion in view of the discussions and makes recommendations for improvement and further research.

5.2 Summary

The general objective of the study was to establish the relationship between non performing loans and its determinants among commercial banks in Kenya. The following research questions guided the study: What is the current level of NPLs in your bank? Which among the following do you think are the factors that cause loan defaults at your bank? Which of the factors mentioned above causes of loan defaults are considered more at your bank? A descriptive design was used for the study. The population comprised of all commercial banks in Kenya as at year 2010 which amounts to 44. A sample of one credit officer in each bank making a total of 44 credit officers in all the Banks were the respondents. Data was collected using semi structured questionnaire and 20 questionnaires out of the 44 were successfully filled and returned. Data was analyzed and summarized in frequencies and percentages. Spearman's Rank Correlation Coefficient was used to determine the relationship between the study variables. The findings have been presented in tables and charts for easier interpretation.

All the respondents which were analysed in this study showed that all banks have clear policies regarding NPL management. 50% of the banks had embraced mobile banking to a very great extent, 25% said that their banks had embraced mobile banking to a great extent while 25% said that their banks had embraced mobile banking to a moderate extent. This shows that majority of the banks had embraced mobile banking to a great extent. Majority of loan defaulters were in the income bracket of between Kshs 0-10,000 and Kshs. 10,000–20,000. The study found out that gender, age, sovereign risk to a small extent, whereas credit analysis, education, commitment to loan payments, business

failure, job loss, changes in economic environment did affect loan defaults to a large extent. An inverse relationship was found between a loanee's age, income and loans held on loan default. The study also found out majority of the respondents felt that loan characteristics such as interest rate, ease of credit access and mode of loan payments affected credit card default to a large or very large extent. The study however did not establish any significant relationship between loan characteristics and loan defaults. No significant correlation was however established between the behavioral characteristics and loan defaults.

According to majority of the respondents, consumer education, monitoring credit standing, due diligence, financial awareness campaigns, frequent customer visits and frequent credit appraisals can help reduce the level of non-performing loans to a large or very large extent. On the other hand, access to customer information, evidence of sources of income and stiffer regulation by central bank can help to a small extent if at all.

5.3 Recommendations

This research study recommends that;

- Commercial banks should put more emphasis on implementation of Credit Risk Management techniques.
- Further studies should be conducted on whether collateralized assets are less risky as compared to non-collateralized assets.

5.4 Conclusion

A number of determinants affected loan defaults. Among them, level and sources of income was the greatest. Poor credit analysis did have significant implications on loan defaults as well as loanee commitment. Each characteristic, however, have strategic significance to the Commercial Banks and would be useful in mitigating loan defaults. Rate of interest charged on loans, loan repayment period and type of loans granted contributed a lot to loan defaults. In addition, staff turnover also influenced loan defaults, albeit to a lesser degree. Most aspects of character/behavioral variables affected loan defaults. Top in the list was character of a loanee.

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APPENDICES

APPENDIX I: Questionnaire

Instruction

Kindly answer all questions by ticking or explaining as appropriate as per your opinion and based on the facts. Where possible you can quote figures.

1. Institutional Information

(a) Bank Name.....

(b) Your position in the bank.....

2. Who owns the Institution?

(a) Government

(b) Private

(c) Mix between Government and Private

(d) Quoted in the NSE

3. NPA levels

(a) Does your bank loan book contain NPLs? Yes () No ()

(b) What is the current level of NPLs in your bank? (approximate)

➤ 0%

➤ 1%

➤ 2%

➤ 3%

➤ 4%

➤ 5%

➤ More than 5%

(c) Has the trend of NPLs in the past 3 years been increasing, constant or decreasing? (state as appropriate)

4. NPA Management

(a) Does your bank have clear policies regarding NPA management?

Yes ()

No ()

(b) If your answer to 4 (a) above is yes, who is involved in their formulation?

➤ Top Management ()

➤ Middle level management ()

➤ Lower level management ()

Any other, specify.....

(c) Does your bank set a limit on the NPA levels in a year? Yes () No ()

(d) Does your bank have adequate provisioning for loans

Adequate () Enough () More than enough ()

I am not aware ()

(e) How is your credit department structured?

➤ Centralised ()

➤ Decentralised ()

(f) How regularly does your bank review the credit policy?

Quarterly ()

Half yearly ()

Yearly ()

Other, specify.....

(g) Does your loan agreement have enough clauses to safe guard the bank against

loan defaults?

Yes ()

No ()

5. Factors causing defaults

Which among the following do you think are the factors that cause loan defaults at your bank?

Changes in economic environment ()

Losses in business ()

Loss of job ()

Business failure ()

Poor credit analysis ()

Lack of access to customer information ()

- Political influence ()
- Legal issues ()
- Lack of commitment ()
- Others, specify.....

6. Which of the factors mentioned in 5 above causes of loan defaults are considered more at your bank?

	Least considered			Most considered	
	1	2	3	4	5
Changes in economic environment	()	()	()	()	()
Losses in business	()	()	()	()	()
Loss of job	()	()	()	()	()
Business failure	()	()	()	()	()
Credit analysis	()	()	()	()	()
Lack of access to customer information	()	()	()	()	()

7. Loan applications

(a) How are loan applications made at your institution?

Automated Method

Credit applications

Others, specify.....

(b) What documents does your bank consider before a loan is granted?

- ID ()
- Pay slips ()
- Monthly statements ()
- Statement of other loan repayments ()
- Certificate of good conduct ()
- Account statement form other banks ()
- Evidence of source of income ()

Others, specify.....

(c) How long does your bank take to process a loan application?

1 week ()

1 month ()

Others, specify.....

(d) Does your bank

(i) Reject loan applications? Yes () No ()

(ii) Reconsider accepting rejected loan applications? Yes () No ()

8. Has the rate of interest increased over the last six months? Yes () No ()

If the answer in question above is yes, by what percentage have the interest rates increased?

0-1% ()

2- 5% ()

Over 5% ()

9. Between which income bracket does the rate of default occur more?

0-10,000 () 10,000-20,000 () 20,000-30,000 () 30,000-50,000 () over 50,000()

10. Does the political climate increase the rate of NPLs? Yes () No ()

11. Does changes in climate influence NPLs? Yes () No ()

12. Which sectors are most affected by climatic conditions e.g drought?

	Least affected				Most affected
	1	2	3	4	5
Agriculture	()	()	()	()	()
Tourism	()	()	()	()	()
Trade	()	()	()	()	()
Mining	()	()	()	()	()
Manufacturing	()	()	()	()	()

13. What category of type of loans is the rate of default highest?

- Overdrafts (ODs)
- Term Loans
- Hire Purchase
- Insurance Premium Financing
- Any Other,.....

14. Does the loan tenure/repayment period affect the rate of default? Yes No

15. Between which repayment period(s) do loan defaults occur more?

- Less than 1 yr 1-5 yrs 5-10 yrs More than 10yrs

16. Credit Risk Management

(a) Which of the following methods of risk assessment/ management and sources of customer information does your bank use?

	Method least used			Method most used	
	1	2	3	4	5
Self-judgment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Statistical method (credit scoring)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CRB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others, specify					

(b) What characteristics in your credit scoring does your bank use?

	Method least used			Method most used	
	1	2	3	4	5
Age	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Occupation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Residence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Marital status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others, specify.....					

(c) Is your credit approval process objective?
 Least objective () Very objective ()

(d) Do you attend credit training regularly?
 Yes () No ()

(e) Does your bank have well documented credit manuals?
 Yes () No ()

(f) Which aspects do you consider before availing credit?

	Least considered			Most considered	
	1	2	3	4	5
Character	()	()	()	()	()
Capital	()	()	()	()	()
Commonsense	()	()	()	()	()
Condition	()	()	()	()	()
Capacity	()	()	()	()	()

(g) Which of the following means do you consider as able to reduce loan defaults?

	Least important			Most important	
	1	2	3	4	5
CRB	()	()	()	()	()
Good credit analysis	()	()	()	()	()
Good loan agreements	()	()	()	()	()

(h) Power to approve credit

(i) Who approves credit or loans?

- Credit department/ Head of credit ()
- Credit analyst ()
- MD ()
- The board ()
- Others, specify.....

(ii) Are there approval limits given to specific people or group of people?

Yes ()

No ()

(j) Does any of the following affect the credit worthiness of a borrower?

	Least affecting		Most affecting		
	1	2	3	4	5
Losses in business	()	()	()	()	()
Previous business failure	()	()	()	()	()
Poor economic conditions	()	()	()	()	()
High cost of living	()	()	()	()	()
Fluctuations/delays in salary payments	()	()	()	()	()
Others, specify.....					

(k) When is a loan considered as an NPA?

One late payment ()

Two late payments ()

Three late payments ()

Others, specify..... ()

(l) How does your bank follow up for payment of loan defaults?

	Least considered			Most considered	
	1	2	3	4	5
Writing letters	()	()	()	()	()
Loan restructuring	()	()	()	()	()
Debt collectors	()	()	()	()	()
Legal action	()	()	()	()	()
Write off	()	()	()	()	()
Others, specify.....					

(m) How important are the following risks to your bank?

	Least important		Most important		
	1	2	3	4	5
Credit risk	()	()	()	()	()
Liquidity risk	()	()	()	()	()
Market risk	()	()	()	()	()
Operational risk	()	()	()	()	()
Sovereign risk	()	()	()	()	()
Interest rate risk	()	()	()	()	()
Technology risk	()	()	()	()	()
Others, specify.....	()				

(n) How do you guard against the above risks?

	Least used		Most used		
	1	2	3	4	5
Futures	()	()	()	()	()
Options	()	()	()	()	()
Forwards	()	()	()	()	()
Diversification	()	()	()	()	()
Powers to approve credit	()	()	()	()	()
Maturity laddering	()	()	()	()	()
Others, specify.....	()				

17. Organization performance

What factors have impacted on the financial performance of your bank in the last 3 years (2007-2010)?

	Least used			Most used	
	1	2	3	4	5
Improved Credit appraisal	()	()	()	()	()
Staff -turn over	()	()	()	()	()
Loan defaults	()	()	()	()	()
Frauds	()	()	()	()	()
Lack of skilled manpower	()	()	()	()	()
Competition	()	()	()	()	()
Others, specify.....	()				

18. Strategic management factors

(a) Does your bank have a long-term strategy? Yes () No ()

(b) What are the sources of funds for loaning at your bank?

- Internally generated ()
- Customer deposits ()
- Bonds ()
- Capital Market ()
- Donor funds ()
- Others, specify..... ()

APPENDIX II: Credit rating/Scoring system

	Characteristic	Points
Residence	i) Rent at same address more than 1-3yrs	1
	ii) Rent at same address more than 3yrs	3
	iii) Own at same address more than 3yrs	3
	iv) Own at the same address more than 5yrs	5
Education	i) High School graduate	1
	ii) Some college	2
	iii) Bachelors degree	3
	iv) Advanced degree	4
Employment	i) 1-2 yrs at present job	1
	ii) 2-5yrs	3
	iii) Over 5yrs	5

APPENDIX III: List of Commercial Banks in Kenya

1. African Banking Corporation, Nairobi
2. Bank of Africa Kenya, Nairobi
3. Bank of Baroda, Nairobi
4. Bank of India, Nairobi (foreign owned)
5. Barclays Bank of Kenya, Nairobi (listed on NSE)
6. CFC Stanbic Bank, Nairobi (listed on NSE)
7. Charterhouse Bank Ltd, Nairobi
8. Chase Bank Ltd, Nairobi
9. Citibank, Nairobi (foreign owned)
10. City Finance Bank, Nairobi
11. Co-operative Bank of Kenya, Nairobi
12. Commercial Bank of Africa, Nairobi
13. Consolidated Bank of Kenya Ltd, Nairobi (gov)
14. Credit Bank Ltd, Nairobi
15. Development Bank of Kenya, Nairobi
16. Diamond Trust Bank, Nairobi
17. Dubai Bank Kenya Ltd, Nairobi
18. Equatorial Commercial Bank Ltd, Nairobi
19. Equity Bank, Nairobi
20. Family Bank, Nairobi
21. Fidelity (Commercial) Bank Ltd, Nairobi
22. Fina Bank Ltd, Nairobi
23. First Community Bank Ltd, Nairobi
24. Giro Commercial Bank Ltd, Nairobi
25. Guardian Bank, Nairobi
26. Gulf African Bank Ltd, Nairobi
27. Habib Bank A.G. Zurich, Nairobi (foreign owned)
28. Habib Bank Ltd, Nairobi (foreign owned)
29. Housing Finance Co. Ltd, Nairobi (gov) (listed on NSE)
30. Imperial Bank, Nairobi

31. I&M Bank Ltd (former Investment & Mortgages Bank Ltd), Nairobi
32. K-Rep Bank Ltd, Nairobi
33. Kenya Commercial Bank Ltd, Nairobi (gov) (listed on NSE)
34. Middle East Bank, Nairobi
35. National Bank of Kenya, Nairobi (gov)
36. National Industrial Credit Bank Ltd (NIB Bank), Nairobi (listed on NSE)
37. Oriental Commercial Bank Ltd, Nairobi
38. Paramount Universal Bank Ltd, Nairobi
39. Prime Bank Ltd, Nairobi
40. Southern Credit Banking Corp. Ltd, Nairobi
41. Standard Chartered Bank , Nairobi (listed on NSE)
42. Trans-National Bank Ltd, Nairobi
43. UBA Kenya Bank Ltd., Nairobi
44. Victoria Commercial Bank Ltd, Nairobi

Source: (CBK, 2010)

APPENDIX III: Correlations

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. ECONOMIC CONDITIONS	1	-	8.501E	-	8.741E	-	-	-	-	-	3.241	.201	-	-
		1.421	-1	6.627E	-1	1.872	3.549	7.956E	5.292	1.442E	E-1		1.842	6.103E
		E-1		-1		E-1	E-1	-1	E-1	-1			E-1	-1
		5.863	.000	.002	.000	.443	1.360	.000	.020	.556	1.758	.410	5.110	2.676E
		E-1					E-1				E-1		E-1	-2
2. LOSSES IN BUSINESS	-.142	1	-.094	-	-.173	-	4.737	4.792E	.138	-	1.474	7.298	4.888	-
				1.268E		4.420	E-1	-1		4.397E	E-1	E-1	E-1	5.139E
				-1		E-1				-1				-1
	.586		.720	.616	.507	.066	4.706	.044	.586	.068	5.593	.001	9.005	1.059E
							E-2				E-1		E-2	-1
	17	18	17	18	17	18	18	18	18	18	18	18	13	11
3. LOSS IN JOB	8.501E-	-	1	-	8.237E	.000	-	-	-	.121	2.300	-	-	-
	1	9.404		7.233E	-1		3.359	6.723E	6.215		E-1	4.185	3.050	9.383E
		E-2		-1			E-1	-1	E-1			E-2	E-1	-1
	.000	7.196		.001	.000	1.000	1.874	.003	.008	.644	3.745	.873	3.109	1.925E
		E-1				E0	E-1				E-1		E-1	-5
	17	17	17	17	17	17	17	17	17	17	17	17	13	11
4. BUSINESS FAILURE	-	-	-	1	-	.273	2.209	.358	.344	4.737E	-	-	2.650	6.103E
	6.627E-	1.268	7.233E		6.569E		E-1			-1	6.312	5.027	E-1	-1
	1	E-1	-1		-1						E-2	E-1		
	.002	6.160	.001		.004	.245	3.493	.122	.138	.035	7.915	.024	3.398	2.676E
		E-1					E-1				E-1		E-1	-2
	19	18	17	20	17	20	20	20	20	20	20	20	15	13
5. CREDIT FACILITIES	8.741E-	-	8.237E	-	1	-	-	-	-	.058	2.544	.048	-	-
	1	1.728	-1	6.569E		2.873	2.705	6.106E	7.313		E-1		4.813	4.271E
		E-1		-1		E-1	E-1	-1	E-1				E-1	-1
	.000	5.072	.000	.004		.264	2.936	.009	.001	.825	3.244	.854	9.585	1.901E
		E-1					E-1				E-1		E-2	-1
	17	17	17	17	17	17	17	17	17	17	17	17	13	11

6. INTEREST RATES	-187	-	.000	.273	-.287	1	5.025	.034	.311	.290	3.350	-	0.000	0.000E
		4.420					E-2				E-2	6.749	E0	0
		E-1										E-1		
	.443	6.624	1.000E	.245	.264		8.334	.888	.183	.215	8.885	.001	1.000	1.000E
		E-2	0				E-1				E-1		E0	0
	19	18	17	20	17	20	20	20	20	20	20	20	15	13
7. POLITICAL CONDITIONS	-355	4.737	-.336	.221	-.271	.050	1	6.667E	5.149	-	6.667	.234	6.017	a
		E-1						-1	E-1	2.887E	E-1		E-1	
	.136	4.706	.187	.349	.294	.833		.001	.020	.217	1.327	.320	1.765	0.000E
		E-2									E-3		E-2	0
	19	18	17	20	17	20	20	20	20	20	20	20	15	13
8. CLIMATIC CONDITIONS	-	4.792	-	.358	-	.034	6.667	1	.343	-	-	.156	a	a
	7.956E-	E-1	6.723E		6.106E		E-1			1.925E	1.111			
	.000	4.421	.003	.122	.009	.888	1.327		.138	.416	6.410	.511	0.000	0.000E
		E-2					E-3				E-1		E0	0
	19	18	17	20	17	20	20	20	20	20	20	20	15	13
9. INCOME	-	1.377	-	.344	-	.311	5.149	.343	1	-	3.433	-	8.026	5.787E
	5.292E-	E-1	6.215E		7.313E		E-1			1.699E	E-1	2.298	E-1	-1
	.020	5.858	.008	.138	.001	.183	2.016	.138		.943	1.384	.923	3.169	3.826E
		E-1					E-2				E-1		E-4	-2
	19	18	17	20	17	20	20	20	20	20	20	20	15	13
10. NATURE/TYPE OF LOAN	-144	-	.121	4.737E	.058	.290	-	-	-	1	-	-	-	-2.335E
		4.397		-1			2.887	1.925E	1.699		1.925	8.115	3.008	-1
		E-1					E-1	-1	E-2		E-1	E-1	E-1	
	.556	6.789	.644	.035	.825	.215	2.171	.416	.943		4.163	.000	2.759	4.425E
		E-2					E-1				E-1		E-1	-1
	19	18	17	20	17	20	20	20	20	20	20	20	15	13
11. LOAN TENURE/REPAYMENT	.324	1.474	.230	-	.254	.034	6.667	-	.343	-	1	.156	6.017	a
		E-1		6.312E			E-1	1.111E		1.925E			E-1	
				-2				-1		-1				

	.176	5.593 E-1	.375	.791	.324	.888	1.327 E-3	.641	.138	.416		.511	1.765 E-2	0.000E 0
	19	18	17	20	17	20	20	20	20	20	20	20	15	13
12. CHARACTER	.201	7.298 E-1	-.042	- 5.027E -1	.048	- 6.749 E-1	2.343 E-1	.156	- 2.298 E-2	- 8.115E -1	1.562 E-1	1	3.008 E-1	- 2.335E -1
	.410	5.863 E-4	.873	.024	.854	.001	3.202 E-1	.511	.923	.000	5.109 E-1		2.759 E-1	4.425E -1
13. LEGAL ISSUES	-.184	4.888 E-1	-.305	.265	-.481	.000	6.017 E-1	^a	8.026 E-1	- 3.008E	6.017 E-1	.301	1	3.390E -1
	.511	9.005 E-2	.311	.340	.096	1.000 E0	1.765 E-2	.000	.000	.276	1.765 E-2	.276		2.572E -1
14. STAFF TURN OVER	- 6.103E- 1	- 5.139 E-1	- 9.383E -1	6.103E -1	-.427	.000	^a	^a	5.787 E-1	.234	^a	- 2.335 E-1	3.390 E-1	1
	.027	1.059 E-1	.000	.027	.190	1.000 E0	0.000 E0	.000	.038	.443	0.000 E0	.443	2.572 E-1	13
	13	11	11	13	11	13	13	13	13	13	13	13	13	13

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

a. Cannot be computed because at least one of the variables is constant.