

**THE RELATIONSHIP BETWEEN CREDIT EVALUATION AND  
NON-PERFORMING LOANS IN COMMERCIAL BANKS IN KENYA**

**BY  
KAMAU PATRICK KAMORE**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENT FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS  
ADMINISTRATION, UNIVERSITY OF NAIROBI**

**NOVEMBER, 2011**

## DECLARATION

This research project is my original work and has not been presented for award of any degree in any University for examination purposely.

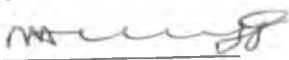
Signature  \_\_\_\_\_

Date: 15/11/2011

Kamau Patrick Kamore

D61/70612/2008

This project has been submitted for examination with my approval as University of Nairobi supervisor.

Signature  \_\_\_\_\_

Date: 16/11/2011

Supervisor

Moses Anyangu

Department of Accounting and Finance

University of Nairobi

## ACKNOWLEDGEMENT

The completion of this project was not easy. It was not created by the author alone but relied on the cooperative assistance of many unseen hands. First I owe special thanks to God all glory for guiding me and for allowing His favour to constantly shine upon me. I sincerely acknowledge my supervisor Moses Anyangu, Lecturer University of Nairobi, Chairman Department of Accounting and Finance, School of Business for his invaluable guidance, wisdom and support. Without your guidance and sharp mind, this research project would not have been easy to complete.

My deepest appreciation goes to my wife Esther for shouldering extra responsibilities, encouragement, understanding and support. The whole family had to undergo sacrifices so that I can comfortably do my studies well.

I would also like to acknowledge the encouragement from all my colleagues and MBA classmates, friends and relatives whose remarkable devotion and dedication throughout the project work was incredible. May God bless the work of their hands.

My profound gratitude to all the other people, not mentioned here, who in one way or another assisted me in completing this MBA program.

## **DEDICATION**

This research study is dedicated to my wife Esther and my daughters Charleen and Linah and son Nathan for their moral support throughout the entire MBA program. My Mum and late Dad, thank you for your support throughout out my childhood education.

To my brothers and Sisters, thank for your compassionate care through my entire studies. Sister Alice, go beyond this level.

## ABSTRACT

Most of the commercial bank failures in Kenya are caused by non-performing loans. Arrears for the affected client firms form more than half the loan portfolios which are typical of the failed banks. Many of the bad debts were failure by the commercial banks to apply the six Cs in credit evaluation, in particular insider lending and lending at high interest rates. The main objective of the study was to determine the relationship between credit evaluation and non-performing loans in commercial banks in Kenya. The research design employed in this study was exploration design. The population of the study was the forty three commercial banks in Kenya. For the purpose of collecting primary data, the researcher used questionnaire as the main data collection instrument. The researcher developed a questionnaire that was to obtain important information about the population. Collected data was checked for completeness, ready for analysis then coded. Tables using spreadsheet were used for further representation of the data for easy understanding and analysis. The inferential statistic regression was established to determine the relationship between credit evaluation and non-performing loans.

From the findings, the study concluded that client ability to repay loan facility is of great concern during credit evaluation and that commercial banks appraisal should have a strategic analysis of the applicant Corporation or firm in relation to market conditions and competitor behavior. The study concluded that the prevailing market conditions were found to be of great importance in credit evaluation. The study further concluded that the character of the clients is of great importance and can be derived through the credit history when determining the character of the clients during the credit evaluation and that the motivation of the clients to repay loan obligation. The study finally concludes that determining character, capability and prevailing market conditions are the most critical aspects in credit evaluation. This call for judgment derived from careful interviewing of the applicant and study of the applicants' historical credit reputation. This concluded that adoption of credit evaluation practices in evaluating credit worthiness of commercial banks clients has negative effects on non-performing loans.

## TABLE OF CONTENTS

Declaration.....	ii
Acknowledgement .....	iii
Dedication .....	iv
Abstract .....	v
Table of Contents.....	vi
List of Tables .....	ix
<b>CHAPTER ONE: INTRODUCTION.....</b>	<b>1</b>
1.1 Background of the study.....	1
1.1.1 Corporate lending .....	1
1.1.2 Non-performing loans and Corporate Lending by commercial banks .....	3
1.1.3 Commercial Banks in Kenya.....	5
1.2 Statement of the problem.....	7
1.3 Objectives of the study .....	8
1.4 Importance of the study .....	8
<b>CHAPTER TWO: LITERATURE REVIEW.....</b>	<b>10</b>
2.1 Introduction.....	10
2.2 Bank Lending.....	10
2.2.1 Non performing loans in Kenya .....	11
2.3 Theories of Non Performing Loans and Lending.....	13
Asymmetric Information and Agency cost Theory .....	14
2.4 Bank Lending Policy .....	16
2.5 Process and Work Analysis of Bank Lending Activity .....	18
2.6 Outputs of Bank Lending Activities .....	19
2.6.1 Internal Measures before Lending Decision.....	19
2.6.2 Internal Measures for Lending Documentation.....	22
2.6.3 Internal Measures for Loan Review .....	22
2.6.4 Internal Sub-Measures of Capacity and Condition.....	24

2.7 Empirical Review .....	24
2.9 The use of the Six Cs in Lending and Non Performing loans .....	31
2.10 Summary of Literature Review .....	33
<b>CHAPTER THREE: RESEARCH METHODOLOGY .....</b>	<b>35</b>
3.1 Introduction.....	35
3.2 Research Design .....	35
3.3 Population of the Study .....	35
3.4 Methods of Data Collection.....	35
3.4.1 Validity Reliability of the Research Instruments.....	36
3.5 Data Collection Procedures .....	36
3.6 Data Analysis.....	36
<b>CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION OF FINDINGS</b> .....	<b>39</b>
4.1 Introduction.....	39
4.2 The Six Cs for Credit Evaluation.....	39
4.2.1 Capacity .....	39
4.2.2 Capital.....	40
4.2.3 Collateral.....	41
4.2.4 Conditions.....	42
4.2.5 Character.....	43
4.2.6 Coverage .....	44
4.2.7 The credit Evaluation and Non-performing loans .....	45
<b>CHAPTER FIVE: DISCUSSION, SUMMARY AND CONCLUSION .....</b>	<b>54</b>
5.1 Summary.....	54
5.2 Conclusion.....	56
5.3 Recommendations.....	57
<b>REFERENCES.....</b>	<b>59</b>
<b>APPENDICES .....</b>	<b>64</b>
Appendix 1: Letter of Introduction.....	64
Appendix 1I: Questionnaire.....	65

## List of Tables

Table: 4.1 Extent of agreeing with the statement on application of capacity of the client during credit evaluation .....	39
Table 4.2 Extent of agreeing with the statement on application of capital available for the clients or corporate firms during credit evaluation.....	40
Table 4.3: Extent to which commercial banks use collateral during credit evaluation for client. ....	41
Table 4.4 Extent to which commercial analyze the condition facing the clients during credit evaluation.....	42
Table 4.5 Extent of agreeing with the following statements on the extent to which your commercial bank evaluates character of client during credit evaluation.....	43
Table 4.6 Extent of using coverage in credit evaluation .....	44
Table 4.7 Extent of using the 6Cs during credit evaluation process in reducing the occurrence of non-performing loans for the commercial bank.....	45
Table 4.8 Extent of use of the six Cs in credit evaluation led to decrease in non performing loans in commercial banks.....	46
Table 4. 9 Non Performing Loans (In Millions) for the year 2008.....	47
Table 4.10 Uses the 6Cs in Credit Evaluations.....	49
Table 4. 11: Model Summary .....	51
Table 4.12: Coefficients (a) .....	52



## CHAPTER ONE: INTRODUCTION

### 1.1 Background of the study

Corporate lending is essentially the same thing as a personal loan, except instead of being made from a bank to an individual; it is made from a bank to a corporation. As a result, the amounts of money being dealt with tend to be substantially larger, and some of the protections are a bit different (Athanasopoulos and Giokas, 2000). The 6Cs of lending include; Character, Capacity, Capital, Collateral, Coverage and Conditions. The tax return is a great clue for character. Those who do not report all of their income or knowingly take a business deduction for personal expenses have demonstrated they are willing to lie to a third party (the IRS) for financial gain (pay less taxes).

Many commercial banks assume first of checking for adequate cash flow and liquidity. Owners of closely held companies often take more compensation than adequate capital allows because their tax advisor suggested it (Berg *et al.*, 1993). Lending institutions use a process that applies a 'global' analysis, though, and they are in business. Lending institutions are reeling under the weight of real estate they never planned to own. As the economy softens, the value of collateral softens too.

A review of the tax return may give some good hints about how the business is coping with conditions. In construction, compare contract labor to wage labor. Contract labor gives more flexibility, but may cause problems later when business picks up and the builder is competing for the subcontractors who are still in business (Zenios *et al.*, 1999). But it may mean a prudent business that has taken a harder look at costs and cut where they can. They may not have reviewed insurance since they quit using extra warehouse space. Workers they are keeping busy instead of laying off may be reassigned to maintenance for now (Chan, and Thakor 2007).

#### 1.1.1 Corporate lending

Corporate lending is essentially the same thing as a personal loan, except instead of being made from a bank to an individual; it is made from a bank to a corporation. As a result, the amounts of money being dealt with tend to be substantially larger, and some of the protections are a bit different (Boot and Thakor 2004). Structured finance includes a

number of different forms of loans, which have various structures in place to try to transfer risk. Structured finance in corporate lending includes various elements, including tranching, in which different securities are classed into different groups, allowing various investment groups to know the risk rating of the loans they are going to buy (Boucher, 1996). Structured corporate lending uses different sorts of securities, including asset-based securities backed by government notes, credit derivatives, collateralized fund organizations, and collateralized debt obligations. Each of these have their own sub-classes as well, and it can get rather complex, but at its core is the idea of lowering risk for the lenders and the people who buy the loans (Harris 2004).

The services in banking industry have changed dramatically in recent years across the globe resulting in the diversification of bank products and portfolio. This diversification has put new challenges to risk management and efficiency of banks and reduces the occurrence of non-Performing loans. The sophistication of financial technology coupled with deregulation and liberalization has made the risk profiles of financial institutions even more complex (Cambell, 2005). During the last decade, risk management at banks has received considerable attention both in developed and developing countries in order to develop a sound and strong banking system. This has led commercial banks to consider both internal and external credit models to devise capital adequacy standards and minimizes the effects of non occurrence (Bebchuk and Fried, 2006).

Kroszner (2002) indicated that, non-performing loans are closely associated with banking crisis. The Japanese financial crisis to non-performing loans was also linked as indicated by Sultana (2002) .Japanese banks still suffer under the weight of thousands of billions of yen of bad loans resulting from the collapse in asset prices a decade ago in the country's financial system (Sultana, 2002). According to Central Bank of Kenya, (2003), there was a 4.5 per cent decline in pre-tax profit for the banking industry in the year 2002. Non-performing loans can be treated as undesirable outputs or costs to a loaning bank, which decrease the bank's performance and failure to adopt the Six Cs to a great extent (Chang, 1999). The risk of non-performing loans mainly arises as the external economic environment becomes worse off such as economic depressions. The adoption the Six Cs to a great extent is significant in reducing the occurrence of non-performing loans and very important for in the improvement of performance of commercial banks (McNulty,

Akhigbe, and Verbrugge, 2001) and the economy's financial environment. The world of corporate lending is arguably one of the most complexes in the world of economics, and even relatively minor events can have massive effects. In spite of its dangers, however, corporate lending is necessary for modern capitalism to survive, and so there is a constant discussion about how to best manage the risk inherent in the system (Koch and Macdonald, 2000).

Most developing economies that undergo the process of financial liberalization have banking systems that are burdened by a large proportion of bad loans and risky credits offered to large corporations. The most common cause of bad loans is directed lending to preferred corporations or favored sectors of the economy. These loans have created several problems for financial sectors and have seriously hindered the growth of the functioning of the commercial banks and the development of the economies. The crises experienced by commercial banks in Kenya are mainly attributed to non-performing loans (Murugu, 1998). For example, Daima bank, according to (Mullei ,2003) was placed under statutory management for failing to meet the minimum core capitalization threshold as well as poor management of loan portfolios offered to individual and corporations ( Chemjor ,2007).

### **1.1.2 Non-performing loans and Corporate Lending by commercial banks**

The financial institutions generally serve as financial intermediaries. It is their function to mobilize funds from savers by issuing to them their own securities. This form of asset transformation is required to ensure that funds are moved from surplus economic units to deficits economic units within the economy. These institutions, like any other business organization, have some risks to manage before they can successfully achieve their aim and objectives, which are almost always profit oriented. Non-performing Loans (NPLs) generally refer to loans which for a relatively long period of time do not generate income; that is the principal and/or interest on these loans has been left unpaid for at least 90 days (Caprio and Klingebiel (1999). Non-performing Loans (NPLs) could also occur when the amortization schedules are not realized as at when due resulting in over-bloated loan interest due for payments.

Non-Performing Loans (NPLs) reduces the liquidity of banks, credit expansion, it slows down the growth of the real sector with direct consequences on the performance of banks, the firm which is in default and the economy as a whole. According to the theory of finance, there are various risks facing financial institutions. They include: credit risk, liquidity risk, market risk, operating risk, reputation risk and legal risk. The system is highly sensitive while the activities of the operators need to be conducted within the laid down and agreed rules and procedures, in order to achieve a reasonable level of efficiency.

Corporate Lending involves the creation and management of risk assets and is an important task of bank management. As in liquidity and portfolio management, effective management of the lending portfolio requires an articulated lending policy. The policy should set out the corporate bank's lending philosophy and objectives including the modalities for implementation, monitoring appraisal and review. Since lending means taking risks and assessing the risks of defaults and movements in interest rates, a written policy would act as a signpost to guide management and lending institutions. Well-conceived lending policies and careful lending practices are essential in facilitating efficient credit system and minimize risk in lending as guided by the six Cs of lending.

It is worthy to clearly point to the fact that risks are major intents of banking business. The degree of success of a bank greatly depends on the ability of management to ensure that the practice of risk management mitigates the impact of risk in such a way, and to such an extent that recorded surplus is not only robust and covers the interests of various stakeholders, but also assures the health integrity of the bank.

One of the major components of bank's assets is loans and advances, and the effective management of such loan portfolio has been a problem. The failure of many banks is not because of their inability to mobilize adequate deposits from the surplus sector to the deficit sector of the economy, but mainly because their lending portfolio have been poorly managed. The banking sector is seen to have an important role to play in the economic development of the country. This is mostly pronounced in the realm of financial intermediation. However, previous studies on the sector showed that little success was recorded in this regard. Some banks find it difficult to meet their obligations

to their customers and owners due to fault or weakness in managing their lending portfolio and the shortcomings, which could render them either illiquid or insolvent (Morgan, 2007).

Since banking crises in emerging economies has multiple causes, there is no single solution to their occurrence (Tirapat 1999). However, Goldstein and Turner (1996) suggest that there are several measures that can significantly reduce the incident of each of the factors underlying banking crises. For example, greater macroeconomic stability, the wider use of market-based hedging instruments and higher levels of bank capital would help to make the consequences of non - performing loans in the domestic banking system less damaging. Limiting the allocation of bank credit to particularly interest-rate-sensitive sectors, close monitoring of lending by weakly capitalized banks and employing the right mix of macroeconomic and exchange rate policies would similarly limit vulnerability to lending booms, asset price collapses and surges of capital inflows, (Goldstein and Turner, 1996). Strict asset classification and provisioning practices could reduce the increases of bad loans and protection against loan losses. Tirapat (1999) agrees with Goldstein and Turner on the role of Government in determining to a great extent the success of efforts to managing such crises. It starts out by reviewing the banking structure, problems faced and some of the causes of recent banking crises. According to the Bank of Japan (2003), the remedies to the problem of Non-performing loans can be grouped into three broad categories, all of which work towards enhancing the banks' earning power. First is to further improve efficiency through cost reduction. Secondly is to pursue a new lending strategy backed by appropriate credit risk evaluation, and third is to provide new financial services to increase fee income. (Laurin and Majnoni, 2003).

### **1.1.3 Commercial Banks in Kenya**

A commercial bank is a type of financial intermediary. Commercial banking is also known as business banking. It is a bank that provides current accounts, savings accounts, and money market accounts and that accepts time deposits. Commercial bank also refers to a bank or a division of a bank primarily dealing with deposits and loans from corporations or large businesses. Commercial banking may also be seen as distinct from

retail banking, which involves the provision of financial services direct to consumers. Many banks offer both commercial and retail banking services (CBK, December 2008).

The Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the Central Bank of Kenya (CBK), governs the Banking industry in Kenya. The banking sector was liberalised in 1995 and exchange controls lifted. The CBK, which falls under the Minister for Finance's docket, is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. The CBK publishes information on Kenya's commercial banks and non-banking financial institutions, interest rates and other publications and guidelines. The banks have come together under the Kenya Bankers Association (KBA), which serves as a lobby for the banks' interests and addresses issues affecting its members. (Kenya Bankers Association annual Report, 2008)

There are forty three banks as categorized by Central Bank and members of the clearing house. Thirty-five of the banks, most of which are small to medium sized, are locally owned. The industry is dominated by a few large banks most of which are foreign-owned, though some are partially locally owned. Six of the major banks are listed on the Nairobi Stock Exchange. The banks have come together under the Kenya Bankers Association (KBA), which serves as a lobby for the banks' interests and addresses issues affecting member institutions. The commercial banks and non-banking financial institutions offer corporate and retail banking services but a small number, mainly comprising the larger banks, offer other services including investment banking.

Banks represent a significant and influential sector of business worldwide that plays a crucial role in the global economy. Commercial banks are financial intermediaries that serve as financial resource mobilization points in the global economy. They channel funds needed by business and household sectors from surplus spending to deficit spending units in the economy (Johnson and Johnson, 1985). A well developed efficient banking sector is an important prerequisite for saving and investment decisions needed for rapid economic growth. A well functioning banking sector provides a system by which a country's most profitable and efficient projects are systematically and continuously funded. The role of banks in an economy is paramount because they execute

monetary policy and provide means for facilitating payment for goods and services in the domestic and international trade.

## **1.2 Statement of the problem**

According to Cousin (2007), most of the bank failures were caused by non-performing loans. Arrears from the corporate firms affected more than half the loan portfolios which were typical of the failed banks. Many of the bad debts were failure by the commercial banks to apply the six Cs of the credit lending strategies, in particular insider lending and lending at high interest rates. Non-Performing Loans create problems for the banking sector's balance sheet on the asset side. They also create a negative impact on the income statement as a result of provisioning for loan losses. In corporate lending an asset-based loan may use real-estate, intellectual property, or expensive equipment. Asset-based lending is one of the more secured forms of corporate lending, since the bank lending the money has protected itself by balancing the value of the assets with the amount of the loan (Golany and Storbeck, 1999).

Caprio and Klingebiel (1999) indicated that corporate lending involves the creation and management of risk assets and is an important task of bank management. As in liquidity and portfolio management, effective management of the lending portfolio requires an articulated lending policy to reduce the occurrence of the non performing loans. The policy should set out the corporate bank's lending philosophy and objectives including the modalities for implementation, monitoring appraisal and review. The Kenya banking sector in particular is reeling from an escalating stock of non-performing loans due to lending to corporate firms (Central Bank of Kenya 2010). In October 2009 monthly issue, CBK states that there was an increase by 7.3 per cent from Sh57.4 billion in October 2008 to Sh61.6 billion at the end of October 2009. Adoption of the six Cs in corporate lending will act as a guideline for the commercial bank determining the firm that qualifies for the credit facilities and reduce the occurrence of the non performing loans in the commercial banks in Kenya. The increase of non-performing loan in commercial banks hinders profit maximization and there is a need for the bank management to seek way of reducing risks yielding to occurrence of non-performing loans due to corporate lending.

A study therefore needs to be carried out to establish effects of the Six Cs on level of nonperforming loans.

Much of the study done on lending are done on developed world, the study indentified limited literature of research studies done locally on corporate lending. Mwangi (2004) did a study on the extent of use of financial statement analysis in corporate lending: a survey of commercial banks in Kenya. Mokogi (2003) undertook a study on economic implications of lending of micro finance institutions on SMES while Anangwe (2004) surveyed lending practices of financial institutions to the agricultural sector in Kenya. All these studies established failure to understand financial market risks led to occurrence of non-performing loans in financial institutions. The studies had not addressed the effects of adoption of the Six Cs on the level on Non-performing loans in commercial banks in Kenya. This study sought to fill this knowledge gap by establishing the relationship between credit evaluation and non performing loans for the commercial banks in Kenya by answering the questions to what extent are the 6Cs used in credit evaluation in non-performing loans in commercial banks in Kenya?

### **1.3 Objectives of the study**

The objective of this study was to determine the relationship between credit evaluation and non performing loans in commercial banks in Kenya

### **1.4 Importance of the study**

This research study will be of great importance to commercial banks in Kenya since it will outline the effects of use of the six Cs in credit evaluation and non performing loans.

The study will be useful to the government in policy making regarding the commercial banks lending to firms and reducing occurrence of non-performing loans. The policy makers will obtain knowledge on the best mechanisms that should be adopted to ensure the credit evaluation is carried to a great extent in lending to the individuals and insitutions to assist in reducing the occurrence of non performing loans in the commercial banks.

The study will also be significant to scholars who will find this study useful as it will provide information on the relationship between the lending to individual and corporate



institutions and non performing loans for commercial banks in Kenya. It will also be of significance to researchers as it will provide basis upon which further studies will be carried out on broad subjects on the relationship between credit evaluation and non performing loans as it will also provide reference for scholars.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1 Introduction

This chapter reviews the existing literature on the subject under research. The matter contained in this chapter relates to past studies on corporate lending and the application of 6C'S in corporate lending. In specific it addresses the bank use of Six Cs in corporate lending and level of non-performing loans in commercial banks in Kenya.

### 2.2 Bank Lending

Loans that constitute a large proportion of the assets in most banks' portfolios are relatively illiquid (Koch and MacDonald, 2000). The theory of asymmetric information argues that it may be impossible to distinguish higher risk borrower from lower risk borrowers (Auronen, 2003), which may result in adverse selection and moral hazards problems. Adverse selection and moral hazards have led to substantial accumulation of non-performing accounts in banks (Bester, 1994; Bofondi and Gobbi, 2003).

Lending to high-risk borrowers is termed as non-conforming lending to indicate that the loans do not meet traditional standards for mortgage insurance. Non-conforming lending includes lending to borrowers with checkered credit histories, unsubstantiated incomes and unstable or no full-time employment. Non-conforming lending market is only now gaining the attention of non-bank mortgage originators, which are interested in financing these loans by securitization. Banks continue to leave the non-performing loan market to non-traditional providers such as finance companies, professional accountants, solicitors and builders, which are able to charge high interest rates to compensate for the substantial credit risk these borrowers represent.

Banks need to monitor carefully the risk-return profile of their lending portfolio to meet capital adequacy guidelines and to ensure long-term survival. The objective of the bank is to maximize profits thus maximize the shareholders wealth. If the primary objective of all bank lending is to make trouble-free advances, the financial capacity and previous borrowing experience of a loan applicant and their determination to repay their debts is all-important (Weaver, 1994).

Cheron et al, (1999) indicated that low-income earners have lower access to real estate and mortgages, but a higher priority for both, compared to high-income earners. Applying stringent lending criteria to low-income borrowers may, in effect, lead to their exclusion from the financial system (which) is not socially acceptable or legitimate (Cheron et al., 1999). At the same time, failure to accommodate for credit risk increases the likelihood of loan default, which in the short term increases financial institution costs and in the long term is passed on to other borrowers in the form of more expensive and/or less accessible retail credit (Lockett, 1988).

The consumer bankruptcy research emphasizes the need for managers to balance the accessible image and social responsibilities of banks with vigilant assessment and monitoring of the credit risk of individual borrowers.

### **2.2.1 Non performing loans in Kenya**

The central bank of Kenya defines NPLs as those loans that are not being serviced as per loan contracts and expose the financial institutions to potential losses (CBK, 2003). It is important to note that non-performing loans refer to accounts whose principal or interest remains unpaid ninety days or more after due date. According to the Central Bank of Kenya Supervision Report (CBK, 2009), the level of non-performing loans has been increasing steadily from Kshs.56 billion in 1997, Kshs.83 billion in 1998 to Kshs.97 billion in 1999. This high level of non-performing loans continues to be an issue of major supervisory concern in Kenya.

According to a study by Brownbridge (1998), most of the bank failures were caused by non-performing loans. Arrears affecting more than half of the loan portfolios were typical of the failed banks. Many of the bad debts were attributable to moral hazard: the adverse incentives on bank owners to adopt imprudent lending strategies, in particular insider lending and lending at high interest rates to borrowers in the most risky segments of the credit markets.

According to the Central Bank of Kenya Supervision Report (Central Bank of Kenya Supervision Report, 2002) profitability of the banking sector declined sharply from Kshs.4.4bn in 1998 to only Kshs. 2 billion in 1999. This was due to increased provisions for the non-performing loans by most institutions. Non-performing loans remained a

major problem for the Co-operative Bank of Kenya Ltd, for instance. Although the volume of total non-performing loans declined, provisions on loan losses increased in 2002. The bank made provisions to the tune of Kshs. 4.7 billion indicating that it is still adversely weighed down by non-performing loans. Besides the impact of these provisions on profitability, the concentration of such loans made recovery difficult owing to the poor state of the economy (Central Bank of Kenya, 2003).

In his address to the Annual General Meeting, Kenya Commercial bank's Chief Executive, Davidson (2003) observed that the bank had reported a loss principally caused by an increase in loan loss provisions, which increased from Kshs 2.8 billion in 2001 to Kshs. 4.9 billion in 2002. These provisions were largely related to the non-performing loans that were booked in the nineties. Mwangi (2004) further observed that KCB had gone further and segregated the non-performing loans into a separate area. The aim was to centralize all the non-performing loans into one unit in order to be accounted for separately. The end result was a computerized debt management system, which would enable the bank to monitor progress far more accurately.

According to Brownbridge (1998), the single biggest contributor to the bad loans of many of the failed local banks was insider lending. In at least half of the bank failures, insider loans accounted for a substantial proportion of the bad debts. Most of the larger local bank failures in Kenya, such as the Continental Bank, Trade Bank and Pan African Bank, involved extensive insider lending, often to politicians. The threat posed by insider lending to the soundness of the banks was exacerbated because many of the insider loans were invested in speculative projects such as real estate development, breached large-loan exposure limits, and were extended to projects which could not generate short-term returns, with the result that the maturities of the bank's assets and liabilities were imprudently mismatched.

The high level of non-performing loans impacts on public confidence in the deposit system. The most profound impact of high non-performing loans in banks portfolio is reduction in bank profitability especially when it comes to disposals, (International Monetary Fund, 2008). Much of Local studies have focused on the effects of credit risk management and significance of factors leading to occurrence of non-performing loans. In the years 2005, the non performing loans for the commercial banks was 67.6 billion, in

the year 2006, the non performing loan were 63,791billion while in the year 2007 the non performing loans were Kshs 40.883 billion while in the year 2008, the non performing loans for the commercial bank were at Kshs 48.7billion .This high level of non-performing loans continues to be an issue of major supervisory concern in Kenya.

## **2.3 Theories of Non Performing Loans and Lending**

### **Enforcement Theory**

One explanation for security is that taking a security interest reduces the cost of enforcing the debt. The cost of enforcing the debt may be lower for two reasons. First, as noted earlier, the procedure by which a creditor sells the assets of the debtor to satisfy the debt may be simpler for a secured creditor than for an unsecured creditor. The extent to which this is true is jurisdiction specific. At the same time, even after judgment is obtained, the unsecured debtor must examine the debtor to determine what assets are available. This may be difficult if the debtor is uncooperative. In contrast, when the debt is secured the assets are identified at the time of the loan when the debtor is likely to be much more cooperative (Bergere *et al* 2000).

The cost of ex ante identification of assets in the context of secured lending must be borne in every case, whereas the costs of ex post identification of assets in the context of an unsecured debt need only be borne if default occurs, but since the ex post costs are higher, net gains are possible. The benefit of cheaper enforcement is greater where the debtor is more likely to default, so this theory implies that secured lending is more likely the less financially stable the debtor is at the time the loan is made. (Even though there is always some possibility of default, security is not ubiquitous if there are at least some associated costs, discussed below under “Cost of Security: The Ubiquity Puzzle”). It also implies that security is more likely in jurisdictions where the difference between the cost of realizing on secured and unsecured debt is greater (Booth and James 2002).

The benefit of reduced costs in identifying the debtor’s assets undoubtedly results in a net gain to society, since, regarding this factor in isolation for simplicity, security will only be taken when the expected benefit outweigh the expected costs. The same argument holds prima facie for the benefits of easier realization, but this raises the puzzle of why unsecured parties should not also be entitled to engage in self help remedies without

obtaining judgment against the debtor. This concern is also reflected in some contexts in secured lending, for example in jurisdictions which only allow realization on real property by judicial sale or foreclosure. It is possible that debtors are not well informed about their rights on default and so do not properly price the cost of self-help realization by the lender, so that judicial supervision is justified. If this is the case, then easier enforcement by the secured party may not entail a net gain to the parties (Deakins and Hussain, 1991).

### **Transaction Cost Theory**

Transaction cost theory has proven an essential framework for decisions on the vertical boundaries of a firm. In that context, this research paper analyses under what conditions workout of distressed real estate debt should be done as an internal service of the bank or rather externally by an external loan servicer. Transaction costs are the costs associated to the division of work. Williamson (2000), indicated that transaction occurs when a good or service is transferred across a technologically separable interfaces. One stage of activity terminates and another one begins. Variables that describe a transaction are, among others, the specificity, the uncertainty, and the frequency of the transaction, whether an asset or a service is only or much more valuable in the context of a specific transaction. In the following, human capital specificity (the workout managers), the asset specificity (on loan and real estate level) and the site specificity (the location of the collateral) are taken into account, (Reddy, 2002).

Goods and services are of a high specificity, if the supply is limited and unique and if there is no comparability. A threat to breach the contract can be seen as untrustworthy, since there is no alternative. A lock-in of one transaction party leads to a hold up. Low specificity exists, if there is a range of homogeneous services or goods and supply is secured. Since goods or services are comparable and competition exists, there is no pricing problem. Further more, high competition may imply motivation and quality (Yousaiken 2001).

### **Asymmetric Information and Agency cost Theory**

According to the agency theory, the principal agency problem can be reduced by better monitoring such as establishing more appropriate incentives for managers. These are

lacking in Malaysia for the following reasons; firstly, market take-over of poorly managed firms by raiders is more difficult in Malaysia because of various government restrictions on corporate equity ownership. Market takeover serves as a check on the behavior of managers. Secondly, many major banks in Malaysia are owned by the government through various government-owned agencies. The principal-agent problem becomes worse when a bank is owned by government (McColgan, 2001). This is because the principal of the bank now is the government, and directors are appointed to run the bank based on political allegiance instead of competence. Thirdly, stock options are rarely used in Malaysia to award bank managers. When bank managers are given remuneration in terms of stock options they will make decisions which will increase the price of the company in the stock market .Fourthly .Managers' horizon is short in Malaysia because their gratuity is not tied to the long term performance of the bank (Bonin et al 2001). As Triantis (1992) points out, two types of asymmetric information problems arise in secured lending. The first arises at the time of contracting when the lender must assess the borrower's present creditworthiness. All other things being equal, a borrower with a better financial status, perhaps more current assets or a more reliable cash-flow, is a better credit risk. Determining the borrower's present financial status is costly and lowering the costs of obtaining this information decreases the cost of credit.

The information may be for example be reliably determined by the lender), in which case the relevant costs are simply the transaction costs of collecting the information ("screening "costs").<sup>13</sup> If the information is private information, that is, information which is not reliably observable by the lender, signaling strategies may be used to provide the information indirectly. The second problem arises after the loan is made when the borrower can take actions which may adversely affect the likelihood of repayment. This moral hazard or agency cost problem can be controlled if the lender can obtain information about the borrower's behavior, but again obtaining and acting upon this information is costly. Various authors have proposed that secured lending is aimed at mitigating each of these problems.

## 2.4 Bank Lending Policy

Bank Lending policy in Lending institutions is a statement of its philosophy, standards, and guidelines that its employees must observe in granting or declining a loan request. These policies determine which sector of the industry or business will be granted loans and which will be avoided, and must be based on the country's relevant laws and regulations. Banks are the most important source of external finance for firms and individual (Cambridge University, 1992; Hall, 1989). Firms and individuals rely on short-term debt, in particular bank overdrafts from banks (Burns et al., 1992). Inadequacies of banks' appraisal processes in applications under the Loan Guarantee Scheme were highlighted in the Robson Rhodes report (1984). The review found a large proportion of applicants were not required to supply even the most basic information. There is limited technical expertise among bank managers in analysing propositions. The appraisal lacks a strategic analysis of the applicant firm in relation to market conditions and competitor behaviour. Binks et al. (1992) point out that information asymmetry poses two problems for banks; moral hazard (monitoring entrepreneurial behaviour) and adverse selection (making errors in lending decisions). Banks will find it difficult to overcome these problems because it is not economical to devote resources to appraisal and monitoring where lending is for relatively small amounts of finance.

Banks have instructions which regulate their lending. Although there is delegated decision making, bank managers make their lending decisions against a background of rules and head office instructions. There are many variables which influence the rules and the work environment, and affect the lending decision (for example, training, internal guidelines, upward referral system and discretionary limits, specific head office directives). The lending decision is a process of interaction between the rules and a manager's experience. The extent of variability is affected by the interpretation of the rules and accountability in interpreting these.

One extreme is the strict interpretation of the rules, which is a product of their rigor and detail. Where they lack detail or are imprecise then the decision will depend on the interpretation, accountability and level of ambiguity. At the other extreme, the decision is made on complete use of own experience and attitude, and depends on the conviction of



the value of the bank manager's own experience. Furthermore, because of the high amount of variables in commercial lending, for example heterogeneity of loan applicants, quality of information, presentation of the proposal, Altman (1971) argues that some element of qualitative, intuitive analysis is required in decision making. Thus credit scoring for business loans is limited and in the past has been used for existing businesses with a history. It can be manipulated by experienced bankers to get the decision they want, and inexperienced bankers may turn down good proposals. Some banks are now developing expert systems; however, an element of subjectivity will continue to exist in decision making (Stanworth and Gray, 1991).

Traditionally, banks see themselves purely as lenders against security and aim to minimize risks, whereas entrepreneurs usually incur risk in starting ventures. This results in a mismatch between the objectives and orientations of banks and the objectives and orientations of entrepreneurs. Banks' relationships with firms have been widely criticized in the press (Bachelor, 1993 ). It has been suggested the relationship problems are a result of mutual misunderstanding, technical problems (bank charges, interest rates and levels of security) and mutual fear (Bradford, 1992). Binks et al. (1988) revealed these mismatches between banks and firms. The mismatches result in liquidity constraints which, combined with moral hazard and adverse selection, contribute to the finance gaps which have been well documented (Stanworth and Gray, 1991). Where asymmetries of information exist banks can adopt a capital-gearing approach to loan evaluation where asset-backed security is required. The provision of personal security or collateral can be seen as a signal of commitment by the business owner, as offered to increase gearing.

Banks have become more cautious in their lending decisions and small firms have sought to repay loans and reduce overdrafts. Banks are committed to firms, and continue to seek out viable propositions. The firms sector is important to banks in terms of profitability. Although there are high risks associated with business lending, banks are compensated in terms of fees, interest margins and deposit balances held in the banks (Churchill and Lewis, 1985).

Banks are moving away from "character lending". For example, banks are increasingly taking the view that lending decisions should be based on the cash flow, business plan

and prospects. Good banking practice suggests that a proposition is evaluated on underlying viability (Rouse, 1989); security is taken only as a “comfort factor”. However, assuming bankers are risk-averse, lack of security may result in the proposition being turned down. Falling property values reduce the availability of adequate security, and may be constraining bank lending to small businesses. Deakins and Philpott (1993) have argued that security can be used as a surrogate for more important information concerning the risk of a proposition in the decision-making process.

## **2.5 Process and Work Analysis of Bank Lending Activity**

Hempel and Simonson (1999) and Koch and Macdonald (2000) all pointed out that the activities in the process of commercial and industrial (C&I) loans follow eight steps. These steps are application, credit analysis, decision, document preparation, closing, recording, servicing and administration, and collection.

The first step of the C&I loan process is the application, which is conducted by a loan officer. This step covers the initial interview and screening of a loan request. Initially, the loan officer obtains as much information as possible about the situation of the borrower, for example, his or her previous credit history, current outstanding loans, and current financial statement. The loan officer gathers company information, including legal status, principal employees, main products or services sold, production techniques employed, important competitors, and directors of the company.

The second step is the credit analysis conducted by the credit department. First, the analyst in the credit department receives the financial information of the borrower gathered by the loan officer; then he or she conducts a comparative and historic analysis of the company's financial data. After finishing the financial comparative analysis, the analyst prepares a recommendation report for the loan officer about whether the loan should be granted, rejected, or qualified.

In the third step, the loan officer obtains the credit analysis report and determines whether the report accurately describes the borrowing capacity and characteristics of the borrower. The loan officer then grants the loan with or without considerations of collateral. The loan officer notifies the borrower of his or her decision and proceeds to

negotiate loan terms if the loan is to be granted. When the loan officer and the borrowing company are in agreement, the fourth step is the loan operation. Here it is necessary to prepare primary notes, agreements, collateral or non-collateral agreements. If collateral is required, the amount of collateral and additional collateral documentation are indicated. In the fifth step, the loan officer obtains the borrower's signatures and receives collateral; then the loan operation is closed and the loan proceeds.

The sixth step is the recording of the loan conducted by the loan operation and credit department staff. A loan operation clerk classifies and codes the loan for entry into the commercial loan system, and he or she reviews the loan for compliance with the bank's loan policies. Finally, the loan operation clerk and credit department staff member file the loan notes, authorization, and receipts in designated files.

The seventh step is loan servicing and administration conducted by a loan operation operator, a loan officer, a credit department staff member, and a financial analyst. The loan operation staff person prepares the loan payment notices to notify the borrower and is responsible for receiving periodic payments. The loan officer makes periodic visits and customer calls to obtain new financial statements from the borrower and provides that information to credit department and reviews the loan for compliance with the loan agreement. A credit department financial analyst also receives and reviews the borrower's periodic financial statements. In the eighth stage, the loan officer may receive periodic delinquency information and need to follow up on this with borrowers. The loan officer also needs to adjust loan terms and conditions as deemed necessary, and to take legal action if non-collectible procedures and foreclosure on the loan are required. After analyzing these lending activities, a value chain of lending activities can be identified, and the rationale for determining how values are created can be determined.

## **2.6 Outputs of Bank Lending Activities**

### **2.6.1 Internal Measures before Lending Decision**

Internal measures are used to monitor and enhance the quality of each lending activity. Hence, the internal measures become the measures of the value or quality of outputs. The visiting report is the output after the activity of application. The purpose of the visiting

report is to help the loan officer understand the borrower's associated problems. The factors for evaluation generally used in this situation are in line with the 6C principles of basic lending. These 6C's are character, capacity, capital, collateral, conditions and control (Rose, 1991), which are also important reference indexes for banks when making a credit analysis to decide whether or not a borrower is worthy of a loan.

Viewed overall, according to the 6C principles, the internal measure for measuring the value or quality of the output at this stage, regarding the visiting report, can be determined by whether the collection of information by the loan officer concerning the 6C's is accurate and complete, or not.

By analyzing a borrower's situation using the 6C principles, the comparatively more difficult situations encountered by a loan officer become capacity and condition because in addition to the understanding and analysis of the information about capacity and condition, it is also necessary to determine whether any future changes will affect the financial situation and the loan repaying ability of an enterprise. Therefore, if an excellent, professional loan officer can accurately and completely collect information in these capacity and condition, the value of the visiting report will be high.

When a loan officer completes the visiting report, he or she enters the activity of credit analysis. The primary outputs of this activity are the financial analysis report and the recommendation report. The credit analyst has to proceed with financial analysis first in accordance with the business financial reports and related documents collected by the loan officer, and turn them into relevant financial reports.

At this stage, the internal measure is used to measure the quality of the analysis in the loan recommendation report, as prepared by the analyst at the credit department using the 6C information. In other words, a comprehensive description and explanation must be provided regarding how to carry out the analysis and whether to approve or object to the loan.

During the analytical process of this stage, there are two difficulties: how to analyze and predict the borrower's recent financial situation and loan repaying ability according to the collected information regarding capacity and condition of the borrower; and how to

provide an appropriate recommendation as to the interest rate of the loan, since only good recommendations will cause the bank not to incur a loss.

Thus, if the associated staff at the credit department can conquer these two difficulties, the value and quality of the financial analysis report and recommendation report can be enhanced.

When the above two reports are complete, they are submitted to the loan officer who proceeds with the decision-making process of the loan. The outputs after entering the third activity, the decision making, consist of the report of the decision and the final C&I loan terms. When a loan officer proceeds with the lending decision in accordance with the recommendation offered by the credit department, there will be three follow-up circumstances. The first is where both the credit department and loan officer object to the lending. The second is where both approve the loan. The third is where either entity objects to the lending. If one party objects, the objecting party must explain his or her reasons in the report regarding that decision. Generally speaking, main differences of opinion regarding the loan can arise from different opinions and viewpoints held about the estimation of the future development of the borrower. Under these circumstances, the internal measure used to measure the outputs at this stage of the loan process relates to the quality of the 6C information used in the report of the decision provides an explanation and prediction of the future financial condition of the corporate enterprise seeking the loan.

When both object to the lending, the entire lending process comes to an end, and there will be no activity and output at the next stage. On the other hand, when both approve the loan, the loan officer will notify the borrower and move on to the negotiation of the lending conditions. The interest rate of the loan is then used as the internal measure for the outputs at this stage. The interest rate is based on the estimated risk of a particular borrower, therefore, the higher the lending interest rates after negotiation, the higher the value of the outputs. To avoid the adverse selection problem, i.e. that the higher lending interest rates are associated with higher loan risk, the internal performance measure approach here tries to reduce the asymmetric information between borrower and bank by

monitoring the employees and accurately assess the borrower's management capability and its strategic fit.

### **2.6.2 Internal Measures for Lending Documentation**

When lending is confirmed and related lending terms are negotiated, the stage of document preparation begins. The outputs of this stage are the documents and contracts related to this loan. The internal measure for assessing the outputs refers to the accuracy achieved in the preparation of the loan-related documents and contracts. The purpose here is to avoid differences in the terms of negotiation set down in the relevant documents. After this step, the completed documents and contracts are submitted to the loan officer for processing and signing by the borrower. Following this exercise, the entire lending process moves to the closing stage.

The output of the closing stage is receiving document or collateral. The internal measures here will indicate whether the documents and contracts selected and received are complete, and whether the amount and quality of the collateral conform to the executed decision report. Next, the person in charge needs to submit relevant documents and information to the loan operation and credit department for the recording stage. The important outputs of this stage are the operating files and credit files. The internal measure at this stage is a determination of whether any documents are missing. The bank must be prevented during the document review and loan information stages from inaccurate assessments of the borrower because of incomplete information, as well as inaccurate assessments of the entire lending process at hand, again because of missing documents.

### **2.6.3 Internal Measures for Loan Review**

The pre-operation of the entire loan comes to an end upon the completion of the recording of the lending document. Following this stage is the servicing and administration for lending processes executed by the bank, such as loan review, the most crucial aspect. The main purposes now are to understand the borrowing enterprise and to continue supervising and monitoring for any possible future changes and difficulties that

the enterprise may experience. Such administration and monitoring will ensure that the entire lending process will be accomplished successfully ((Luckett, 1988).

The output upon the completion of the loan operation is the term report of payment, and the aim of which is to determine regularly all aspects of the borrower's loan payment costs. Thus, the internal measure selected for assessment at this stage is whether and when to make a timely reaction to any irregular payment by the borrower. In the next stage, the loan officer has to pay regular visits to acquire an understanding of the borrower's current and future situation and collect related information. The output of this stage is the term report after a periodic inspection visit. This collection of information should follow the 6C principles at the application stage and involve a comparison of differences in the corresponding information that was involved at successive stages of the loan process. The internal measure for assessing the output of this stage rests on the accuracy and completeness of the 6C information collected during the periodic inspection process (Brickly et al 2001).

After the visits, the report made by the loan officer is submitted to the credit department for financial review and for new or renewed recommendations. Thus, the term report of financial analysis and recommendation become the outputs. The aim is to truly understand whether the borrower's own financial situation and structure have altered and if the original promised value of collateral differs from later assessments. The recommendations from this report are provided to the loan officer for reference. Consequently, the internal measure for assessing the output of this stage takes on the nature of the former stage of credit analysis as reference, that is, the quality of the analysis of recommendation report regarding 6C information (Bradford, 1992).

In this stage, the loan officer and credit department staff can still face problem described previously that has been identified, i.e. that either entity objects to the continuing lending. When these two persons in charge recognize that changes in the borrower's current financial situation have occurred and result can be a slump in the entire industrial environment and market, the possibility of collecting the loan back early must be addressed. Certainly, a wrong decision here will affect the profit earnings of this loan.

When the entire lending process has come to an end, the output of this stage represents the profit earning status of the loan, which is also the final measure of the loan in terms of lending performance assessment.

#### **2.6.4 Internal Sub-Measures of Capacity and Condition**

Many theoretical and empirical studies have verified that internal organizational management and strategies are the determinants of a business's profitability. Hence, our research has developed internal sub-measures regarding the borrower's capacity and condition through an analysis of the borrower's strategies and its organizational architecture.

To understand the borrower's capacity regarding its organizational capability, we adopt the comprehensive, cross-functional framework provided by Brickly et al. (2001) to analyze the borrower's organizational architecture. Their proposed organizational architecture includes: the assignment of decision rights, the methods rewarding individuals and the structure of systems that evaluate the performance of both individuals and business units. Thoroughly understanding this organizational architecture can help bank loan officers predict a borrower's future performance.

When analyzing a borrower's condition, the research utilizes the framework developed by Besanko et al. (1996), which explains why some of the firms achieve competitive advantage, and others do not. The framework reveals that firm profitability is a function not only of industry conditions, but also of the amount of value the firm creates relative to its competitors. The amount of value the firm creates in comparison to its competitors depends on the appropriateness of its cost and differentiation positions relative to its competitors.

#### **2.7 Empirical Review**

Prior research suggests that banks strongly influence economic development and the efficient corporate lending in a lower cost of capital to firms, a boost in capital formations, and an increase in productivity of the firms (Fama, 1985). Basel, (2004) indicated that formulation of effective lending procedure and policies heightened the importance of internal regulatory mechanisms of banks such as corporate governance



leading to better improve bank profitability due to reduction of non performing loans . In particular, the use of Six Cs in commercial banks are expected to lower the level of non performing loans, improves banks' valuation, cost of capital, performance, and risk-taking behavior. Notwithstanding, the economic relevance of banks and corporate lending framework within banks which has increase market credibility and subsequently enables bank to collect loans at lower cost and lower risks (Basel ,2004). Stafford (2001) studied bank's performance from 27 developing countries. They find evidence that there is higher valuation of firms in countries with better corporate lending practices.

Karabulut and Bilgin (2007) carried out a study with the purpose of examining the impact of the unlimited deposit insurance on Non-performing Loans (NPLs) and market discipline. They argued that deposit insurance program play a crucial role in achieving financial stability. Governments in many advanced and developing economies established deposit insurance schemes for reducing the risk of systemic failure of banks. The report shows that deposit insurance has a beneficial effect of reducing the probability of a bank run. However deposit insurance systems have their own set of problems. Deposit insurance systems create moral hazard incentives that encourage banks to take excessive risk. In conclusion, the study shows that unlimited deposit insurance caused a remarkable increase at Non-performing Loans (NPLs) for the commercial banks. What this means is that deposit insurance institutions established by monetary authorities must re-examine the current policy of blanket guarantee of deposits in the banking sector.

In Taiwan, Hu, Li and Chu (2004) carried out their own study examining how ownership structure affects Non-performing Loans (NPLs). Their findings revealed that an increase in the government's shareholding facilitates political lobbying. On the other hand, private shareholding induces more Non-performing Loans (NPLs) to be manipulated by corrupt private owners. The results show that the rate of NPLs decreased as the ratio of government shareholding in a bank rose (up to 63.51%), while the rate thereafter increased. The report posits further that joint ownership has the lowest rate of NPLs among Taiwanese public, mixed and private commercial banks. The joint ownership effect on NPLs ratios is negative and its magnitude is sufficiently large in Taiwan's banking industry. Bank size is negatively related to the rate of NPLs, which supports their argument that larger banks have more resources for determining the quality of loans.

In Africa, Woo, David (2000) investigated the determinants of non-performing loans in sub-Saharan Africa using correlation and causality analysis. The analysis was based on data drawn from 16 African countries (7 CFA and 9 non-CFA). The sub-panel of CFA countries includes: (1) Benin, (2) Cameroon, (3) Chad, (4) Cote d'Ivoire, (5) Senegal and (7) Togo. The sub-panel of non-CFA countries includes: (8) Botswana, (9) Cape Verde, (10) Ethiopia, (11) Kenya, (12) Malawi, (13) Rwanda, (14) South Africa, (15) Swaziland and (16) Zimbabwe. The sample selection was dictated by the scope of the database and availability of financial information on these countries. The data are provided on an annual basis end-of-period, between 1993 and 2002, included. The minimum length of the panel covers a period of 3 years for the shortest series (Chad and Rwanda), and up to 10 years for the longest series, producing an unbalanced panel. The correlation and causality analysis focuses on a number of macroeconomic and microeconomic (banking-sector) variables. Perro and Ruoff (1997), indicated that Korean commercial banks and merchant banking corporations had been significantly been affected by poor lending policies, and that the subsequent profitability of financial institutions decline. There is therefore more emphasize on the importance of improving existing lending policies as a precondition for successful financial liberalization.

Perro and Ruoff (1997) indicated that lending framework dictates that as long as the demand for liquidity from depositors and borrowers is not too highly correlated, the intermediary should pool these two classes of customers together to conserve on its need to hold costly liquid assets the buffer against unexpected deposit withdrawals and loan take downs. Shiozaki (2002) identified Japan's high level of NPLs as an outcome of prolonged economic stagnation and deflation in the economy since the bursting of the "bubble" in the early 1990s. In addition, Hanazaki et. al. (2002) and Yanagisawa (2001) highlight cross-shareholdings, stock market volatility, virtual blanket guarantee of bank debts and the system of "relationship banking" as factors responsible for the prolonged fragility of the Japanese banking sector.

Anecdotal evidence consistently indicates that riskier borrowers more often pledge collateral. Morsman (1986) indicated that there are few statistical studies of the relationship between collateral and risk. Reddy (2002), obtained data from the files of

bank examiners and classified loans as good or bad according to the examiner's classification. He regressed a good-bad dummy variable on a secured-unsecured dummy variable and found secured loans to be riskier, although the coefficient was significant only at the 10% level. Unfortunately, the sample was limited both in size and scope, consisting of 75 bad loans and 225 good loans 6 to borrowers with assets of less than \$12 million. Hester (1979) based his study on the results of a pilot survey which gathered information on 1,072 business loans of \$10,000 or more made by sixty-two banks in 1972. He found that collateral is less likely to be required as borrower size increases, when the ratio of working capital to total assets is high, and if the Dun & Bradstreet appraisal is high. Collateral was more likely to be required when the firm was highly leveraged and when the loan was a demand loan that loans to riskier borrowers are more likely to be secured. At the same time, low rates are charged to larger borrowers and when D&B appraisal is high and higher rates are charged when the firm is highly leveraged. (The ratio of working capital to total assets and whether the loan was a demand note was found to have no significant effect on rates. Thus loans to larger firms, and presumably safer firms, are less likely to be secured and are made at lower interest rates (Mikiko.2003)

## **2.8 The Six Cs of Lending**

### **Capacity**

Refers to corporate firm ability to meet the loan repayments. The commercial banks seek to know exactly how it intends to repay the loan. The lender will consider the cash flow from the business, the timing of repayment, and the probability of successful repayment of the loan. Lenders will also consider payment history as an indicator of future payment potential. For example, if you have a history of not paying back loans then it becomes more difficult to obtain additional loans (Ham and Melnik 2007).

In its most basic form, cash flow is defined as earnings before interest, taxes, depreciation and amortization (EBITDA). The first step in the analysis of EBITDA is an examination of each of the components. Some of the questions a lender may attempt to answer are: What has been the historical trend in earnings? Are there extraordinary expenses that may

have affected earnings performance? What are the trends in sales and gross profit margin and are those numbers sustainable? What is the trend in operating expenses? How does the depreciation and amortization expense relate to the need for capital purchases (in other words should depreciation be considered a real expense (Woo, 2000)

Once the lender is satisfied with the EBITDA calculation, it will be compared to the company's current obligations (debt service). Debt service is simply the anticipated principal and interest payments on all debt. When revolving lines of credit are present the lender may use the interest due on the average outstanding balance but will more likely be conservative and calculate the interest payment as if the line of credit is fully funded.

The key ratio then used to measure the capacity is called the debt service coverage ratio (DSCR). The DSCR is simply EBITDA/fixed obligations. In most cases, the lender will want cash flow from operations to exceed debt service by 20 percent. Therefore the DSCR should be greater than 1.20.

In some cases, the lender may also include a debt service calculation based on an amortization of a fully funded line of credit. This is called a "downside analysis" and typically assumes a five-year repayment of the fully funded line of credit. Often this analysis is included with an analysis of the guarantor's personal cash flow. The combination of the business cash flow and personal cash flow is called a "global cash flow analysis." For the "downside analysis" the lender would like to see a DSCR greater than 1.00 (Bester2004).

The analysis of capacity gets somewhat more complicated for working capital and seasonal lines of credit. For those types of loans not only will the bank examine EBITDA and the DSCR but will include an analysis of the company's ability to properly manage the conversion of working asset to cash. Essentially, this involves an analysis of short-term liquidity. As with EBITDA, the first step in the analysis of liquidity is an examination of the components. Often, some modifications to current assets and current liabilities may be required. Once the lender is satisfied with the composition of the current assets and current liabilities, an analysis can be performed.

The most widely used measures of liquidity are net working capital (current assets – current liabilities) and the current ratio (current assets/current liabilities). To gain more insight, the analysis must always be done on a comparative basis over time. Trends are examined and compared to industry averages. However, as a general rule of thumb the lender is looking for a current ratio in excess of 2.0 (Bofondi and Gobbi, 2003).

### **Capital Availability for the Corporate Firm**

This is the money invested in the business and is an indicator of how much is at risk should the business fail. Lenders will generally consider the company's debt-to-equity ratio to understand how much money the lender is being asked to lend (debt) in relation to how much the owners have invested (equity). A high debt-to-equity ratio also indicates that the company already has a high level of loans and could be a higher financial risk. Capital (AKA equity) represents the funds retained in the company to provide a cushion against unexpected losses. A strong equity position will provide financial resiliency to help a firm whether periods of operational adversity. Minimal or non-existent equity makes a business susceptible to miscalculation and thereby increases the risk of default. A strong equity position also ensures that the owners) will remain committed to the business.

There is generally a careful examination of the debt-to-worth ratio of the company to understand how much money the lender is being asked to lend (debt) in relation to how much the owners) have invested (worth). As a rule of thumb the maximum a lender is generally willing to contribute to the operation of a company is 75 percent compared to the owners) 25 percent. Therefore, a good rule of thumb is a debt to worth ratio of three to one (Shioraki, 2002).

### **Corporate Firms Collateral**

This is a form of security that the corporate firms provide to the commercial bank against the amount of cash to be offered. Banks usually require collateral as a cover in case cannot repay the loan. If you default on the loan, then the lender takes possession of the collateral in place of the debt. The loan agreement should carefully specify all items serving as collateral. Equipment, buildings, accounts receivable, and inventory are all

potential forms of collateral. The commercial bank will normally want the term of the loan to match the useful life of the asset used as collateral. For example, if equipment with a five-year expected life span is used as collateral, then the term of the loan will generally be five years or less. In some cases, the lender may ask for a third-party guarantee where someone else signs a document promising to repay the loan if the principal fails to pay (Binks and Enne 1997).

### **Conditions**

This refers to the intended purpose of the loan, for example working capital, additional equipment, or new offices. The size of loan in relation to the specific use will help the lender evaluate your loan request. Conditions also include the national, industry level, and local economic situation. A volatile or unstable economic situation can negatively impact the evaluation. However, positive expectations can increase the likelihood of obtaining the loan. The commercial bank has to analysis the economy currently affecting corporate business as well as the competition facing the firm as well as impact sales. The conditions should outline the "Borrowing Cause" already discussed. This will help the commercial bank determine how firm loan must be structured (Reddy 2002).

### **Character**

This relates to the motivation of the borrower to repay a debt obligation. It is unlike any other financial performance indicator found in the financial statements. Determining character is a judgment call derived from careful interviewing of the applicant and study of the applicants' historical credit reputation. Background checks and interviews with others having business relations with the applicant are useful to make a fair appraisal. Since there isn't an accurate way to judge character, the lender will decide subjectively whether or not the firms are sufficiently trustworthy to repay the loan. The commercial banks will investigate the corporate payment history, review a credit bureau report, and the experience in business. The quality of references and the background and experience of corporate board of director and other employees will also be considered (Binks and Enne 1997).

## Coverage

The commercial banks must also assess whether the firm are well covered by the insurance sector and also assess whether the business can still meet its loan obligation incase the market is faced by hard economic times (Kithinji and Waweru.2007). Commercial banks are prepared to take the risks normally associated with banking. The corporate firm's interest rate and loan terms are based on that level of risk over which they feel they have some control. When possible, banks look for opportunities to shed risk that can be placed elsewhere, and not borne by the borrower or lender. To analyze a business's cash flow when making a loan underwriting decision, commercial bank must scrutinize a variety of factors, attendee's learned. In particular, the commercial bank must address seven internal aspects of the business applying for the loan (Mwangi 2004).

Commercial banks will review payment history, types of accounts and balances on revolving credit lines, judgments, liens, the length of time accounts have been established and anything else adverse. The more history of the firm, the more likely it will be granted a loan which will be very high. It's a good idea for commercial banks to prepare credit report before granting request a business credit so that commercial banks are prepared to discuss any concerns that may exist (Westermann, 2003).

### **2.9 The use of the Six Cs in Lending and Non Performing loans**

In china for example, one method has been successfully used is turning over the non-performing assets to Asset management companies (China Daily, 2002). According to Reddy (2002), appropriate provisioning for non-performing assets (up to 50% of gross non performing assets) has been successfully used to caution bank agents the debilitating effects of non-performing loans. It indicates that as long as the demand for liquidity from depositors and borrowers is not too highly correlated, the intermediary should pool these two classes of customers together to conserve on its need to hold costly liquid assets the buffer against unexpected deposit withdrawals and loan take downs. The Basel Committee on Banking Supervision and the International Institute of Finance has set high hurdles in terms of principles and recommendations in management of non performing loans which leads better financial performance of the banks.

Several commercial banks in Kenya are already harvesting the fruits of prudent risk management practices. As reported by Wahome (2004), the Cooperative Bank of Kenya announced a 70 per cent rise in its pre-tax profitability for year 2003 and declared its first dividend in six years. This is the second straight year of profitability for the bank, which had earlier reported a Sh2 billion loss in 2000. The chief executive officer attributed the impressive results to aggressive cost management and which requires the use of more efficient management practices. Industry experts point to many different underlying causes for the demise of growth in deposits, such as the increased financial sophistication of the public, demographic shifts, the rise of nonbank competitors offering a whole wave of alternative investment products, new delivery systems such as the Internet, and competition from credit unions and insurance companies.

The main contributor to commercial bank improved operating results due to effective use of the six Cs to minimize the rise of non performing loans and improvement in financial performance leading to increase in assets. This is demonstrated by a reduction in non-performing assets of 51.9% from the same time period in 2009. However, even with the improvement in asset quality, commercial banks will continue to seek more strategies to mitigate against occurrence of non performing loan to gain more profitable assets. Bank board of Directors committed to maintaining adequate reserves should the national economy present unforeseen future challenges. The Risk-Based Capital Regulation by the Basle Accord II has been playing increasing critical role in commercial bank decisions. It mandates that banks hold capital in proportion to their perceived credit risks. The Risk-Based Capital (RBC) is viewed as a regulatory tax that is higher on assets in categories that are assigned higher risk weights. (Berger and Udell, 1994) As capital is usually more expensive to raise than other assets, such as insured deposits, therefore, the implementation of RBC is expected to further magnify the substitution effect, which encourages banks to switch from the 100 percent risk credit category, such as commercial loans, to adoption of the use of the Six Cs such as analysing the character of the firm, prevailing economic conditions, coverage, capital and security pledge by the firm for loan facility.



## 2.10 Summary of Literature Review

Non-Performing loans are one of the major causes of the economic stagnation problems in an economy. Each non-performing loan in the financial sector is viewed as an obverse mirror image of an ailing unprofitable corporate enterprise. From this perspective, the management of non-performing loans is a necessary condition to improve the economic status. If the non-performing loans are kept existing and continuously rolled over, the resources are locked up in unprofitable sectors; thus, hindering the economic growth and impairing the economic efficiency.

While non-performing loans are a phenomenon that is permanently present in the balance sheets of banks and other lending institutions, the significant rise of non-performing loans in banks' balance sheets implies that the commercial bank need to effectively use the six Cs when lending to corporate investors. Krueger and Tornell (1999) support the credit crunch view and attribute the credit crunch in Mexico after the 1995 crisis partially to the bad loans. They point out that banks were burdened with credits of negative real value, thereby reducing the capacity of the banks in providing fresh fund for new projects. Agung et. al. (2001) using the macro and micro panel data analyses to study the existence of a credit crunch in Indonesia after the crisis. Both the macro and micro evidences show that there was a credit crunch, characterised by an excess demand for loans, starting to emerge in August 1997, one month after the contagion effects of the exchange rate turmoil in Thailand spreading to Indonesia.

They investigate the relationship between the loan supply and real lending capacity, lending rates, real out put, bank's capital ratio, and non-performing loan. The results show that the coefficients on non - performing loans are negative and significant, which indicate that bank credit supply declines with the worsening of the non - performing loans problem. Westermann (2003) compares the cases of Germany after the credit boom of the late 1990s and Japan aftermath of the bubble burst in early 1990s. He argues that even though the German banks were in a better condition than Japanese banks, as the path of German's aggregate credit looks so similar to that of Japan, it is at least unlikely that the German credit slowdown was entirely driven by demand, while that of Japan was mostly caused by lack of supply. There must at least be some supply side changes that affect the

aggregate credit, and differences only exist in the magnitude of the problem. He further points out that the one of the main reasons in Germany for the credit crunch is the increased risk of non-performing loans after the credit boom. The management practices for non performing loans ensure commercial bank secure better returns on Equity (Mwangi 2004). Banks have moved aggressively to increase new lending, in line with government policy, employ qualified personnel and analyzing risks all geared towards improvement of bank general performance (Kithinji and Waweru.2007) .The study will seek to establish what is the relationship between extent of use of six Cs and level of non performing loans in commercial bank in Kenya.

## CHAPTER THREE: RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter provided the methodology of the study. It gave the specific procedure that was followed in undertaking the study. The research design, target population, sampling design, data collection methods and data analysis was described in this chapter.

### 3.2 Research Design

The research design to be employed in this study was exploration design. The design describes the relationships that exist between the independent and dependent variables, (Kothari, 2003). Donald (2006) notes that a research design is the structure of the research, it is the “glue ” that holds all the elements in a research project together. Kothari (2003) defines a research design as the scheme, outline or plan that is used to generate answers to research problems. Exploratory research design was chosen because it enabled the researcher to establish the relationship between use of the six Cs in lending and the level of non-performing loans in commercial banks in Kenya.

### 3.3 Population of the Study

According to Ngechu (2004), a population is a well-defined or set of people, services, elements, events, group of things or households that are being investigated. This definition ensures that population of interest is homogeneous. The population of the study was all the 43 commercial banks in Kenya.

### 3.4 Methods of Data Collection

For the purpose of collecting primary data, the researcher used questionnaire as the main data collection instrument. The researcher developed a questionnaire that was used to obtain important information about the population. According to Saunders, 2003 questionnaire can be used for both descriptive and explanatory research. Since this is a descriptive research it helps to identify and describe the variability in different phenomena through attitude, opinion and questionnaire of organizational practices. Self-administered questionnaires will be distributed to the selected respondents and later collected after one week. The questionnaire was well typed out and printed. The questionnaire contained questions which comprised of likert scale, closed-ended questions and also open ended questions.

### **3.4.1 Validity Reliability of the Research Instruments**

Validity is the accuracy or meaningfulness and technical soundness of the research. It is the degree to which a test measure what it purport to measure. (Mugenda and Mugenda, 1999), (Borg and Gall, 1989) stated that, to enhance validity of a questionnaire, a Pilot population similar to the target population was conducted. Also to increase validity of the study, data was collected from reliable sources, the language used on the questionnaire was kept simple to avoid any ambiguity and misunderstanding.

Reliability of instruments measures consistency of the instrument. Best and Khan (2001), consider reliability to be the degree of consistency that the instruments or procedure of measurement demonstrates. Data collected will be subjected to analysis using cronbach alpha. The closer the reliability coefficients get to 1.0 the better. Reliability estimated the consistency of measurement, or more simply the degree to which an instrument measured the same way each time it is used under the same conditions with the same subjects.

### **3.5 Data Collection Procedures**

Primary data was collected using a structured questionnaire distributed to sample population. The study used questionnaires primarily due to their practicability and applicability to the research problem. The questionnaire were self-administered by the researcher to the respondent through drop and pick method.

### **3.6 Data Analysis**

The research was both quantitative and qualitative in nature. Collected data was checked for completeness ready for analysis then coded. Data was analyzed through the statistical package for social sciences (SPSS version 17). Tables and charts were used for further representation for easy understanding and analysis. The data was then summarized, coded and tabulated. Inferential statistic was used to establish the relationship between credit evaluation and non-performing loans for the commercial bank in Kenya .The inferential statistic seeks to establish a causal effect relating independence variables to the dependent variable.

## The Model

The study model was based on two major components namely the credit evaluation and non-performing loans for the commercial banks in Kenya. The study conceptualized that level of non-performing loans of commercial banks is a functional of credit evaluation.

Equation (1) below presents the conceptual model in this relationship.

$F$  (Level of non-performing loans)= $f$  (Character, Capital, Capacity, Conditions, Collateral and Coverage..... Eq.(1)

Where:

FPCB = Level of non-performing loans

Character= Corporate Firms' historical credit reputation

Capital= Amount of Money Invested in the Corporate Firm

Capacity= Ability to Repay the Loan, Economic level, competition

Conditions= Purpose of the Loan

Collateral=Security Provided to the Bank by the Corporate Firm

Coverage= Expansion of the Firm, Insurance of the Firm

A regression model on level of non- performing loans for commercial banks and credit evaluation in Kenya applied to examine the relationship between the variables. The model treats level of non-performing loans for the commercial banks as dependent variable while the independent variables are the Six Cs used during corporate lending which include Character, Capital, Capacity, Conditions, Collateral and Coverage. The response on extent of the use of the Six Cs in the corporate lending will be measured by computing indices based on the responses derived from the Likert-Scaled questions.

Equation (2) presents the algebraic expression of the analytical model to be applied

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6$$

Y= Depended variable, Non-performing loan

$\alpha$  = Constant

$\beta$ = Coefficient of the factors

$X_1$ = Character

$X_2$ = Capital

$X_3$ = Capacity,

$X_4$ = Conditions

$X_5$ = Collateral

$X_6$ = Coverage

The non-performing loans were an indicator of how commercial bank was relative to credit evaluation. The change of the level of non-performing loans gives an idea as to how efficient is the use of the Six Cs during lending to the corporate firms.

## CHAPTER FOUR

### DATA ANALYSIS AND INTERPRETATION OF FINDINGS

#### 4.1 Introduction

This chapter presents the discussion and conclusion of the study. From the study, the target population 43 banks where 150 respondents were selected for the purpose of data collection, 150 respondents responded and returned the questionnaires. This constituted 85 % response rate.

#### 4.2 The Six Cs for Credit Evaluation

##### 4.2.1 Capacity

**Table: 4.1 Extent of agreeing with the statement on application of capacity of the client during credit evaluation**

Statement	N	Mean	Std dev.
Client ability to repay loan facility is of great concern during credit evaluation	150	4.66	0.95
Cash flow statement is crucial during client assessment on repayment of loans	150	4.43	0.35
Timing of loan repayment is determined when analyzing the capacity of the clients	150	2.61	0.17
Commercial banks evaluates the company ability to manage working capital to cash	150	3.86	0.24
Commercial banks appraisal should have a strategic analysis of the applicant corporation or firm in relation to market conditions and competitor behavior	150	4.54	0.22

*Source: research data (2011)*

The study sought to find the extent to which the respondents agreed on the statement on application of capacity of the client during credit evaluation. From the findings, majority of the respondents strongly agreed that client ability to repay loan facility is of great

concern during credit evaluation and that commercial banks appraisal should have a strategic analysis of the applicant Corporation or firm in relation to market conditions and competitor behavior as indicated by a mean of 4.66 and 4.54 with standard deviation of 0.95 and 0.22. The study found that most of the respondents agreed that cash flow statement is crucial during client assessment on repayment of loans, commercial banks evaluates the company ability to manage working capital to cash as indicated by a mean of 4.33 and 3.86 supported by the standard deviation of 0.35 and 0.24. The study further found that most of the respondents were neutral on whether the timing of loan repayment is determined when analyzing the capacity of the clients as indicated by a mean of 2.61 with the standard deviation of 0.17.

#### 4.2.2 Capital

**Table 4.2 Extent of agreeing with the statement on application of capital available for the clients or corporate firms during credit evaluation**

Statement on use of capital during credit Evaluation	N	Mean	Std dev.
The amount of cash invested in the business is of great importance during credit evaluation in our bank	150	3.63	0.35
Through business capital evaluation, our commercial bank is able to determine how much to offer for loans	150	3.91	0.15
strong business equity enables our commercial bank to offer loans to our clients as it ensure the client remain committed to the business	150	3.88	0.25
Motivation to repay the loan or characters of the firm	150	3.47	0.27
Our commercial bank adopt use of capital assessment during credit evaluation to a very great extent	150	4.61	0.80

*Source: research data (2011)*

The study seeks to know the extent to which the respondents agreed on the statement concerning the application of capital available for the clients or corporate firms during credit evaluation. From the findings, majority of the respondents strongly agreed that commercial bank adopt use of capital assessment during credit evaluation to a very great



extent as indicated by a mean of 4.61 supported by standard deviation of 0.80. Most of them agreed that through business capital evaluation, commercial bank is able to determine how much to offer for loans, strong business equity enables our commercial bank to offer loans to our clients as it ensure the client remain committed to the business, The amount of cash invested in the business is of great importance during credit evaluation in their bank as indicated by a mean of 3.91, 3.88 and 3.63 with a standard deviation of 0.15, 0.25 and 0.35. The study further found that most of the respondents were neutral on motivation to repay the loan or characters of the firm as indicated by a mean of 3.43 with a standard deviation of 0.27. This clearly indicates that commercial banks use capital at client disposal in credit evaluation .

#### 4.2.3 Collateral

**Table 4.3: Extent to which commercial banks use collateral during credit evaluation for client.**

	Frequency	Percentage
Very great extent	20	55.5
Great extent	14	33.3
Moderate	4	11.2
Total	150	100.0

*Source: Research data (2011)*

The study sought to find the extent to which commercial banks use collateral during credit evaluation for their client. From the findings majority 55.5% of the respondents strongly agreed to a very great extent that commercial banks use collateral during credit evaluation for your client. The study further found that most of the respondents agreed to a great extent that commercial banks use collateral during credit evaluation for their client as indicated by 33.3% of the respondents while 11.2% of the respondents indicated they agreed to a moderate extent that commercial banks use collateral during credit evaluation for their client. This clearly indicates that majority of the commercial bank are not using collateral in evaluating their client credit worthiness.

#### 4.2.4 Conditions

**Table 4.4 Extent to which commercial analyze the condition facing the clients during credit evaluation**

Statement	N	Mean	Std dev.
Our commercial bank analyses the purpose of the loan applied by our clients	150	4.87	0.77
Our commercial bank analyses the amount of loan facility applied for in relations to specific use during credit evaluation process	150	3.75	0.43
Our commercial bank analyses the economic situation facing the firms and positive expectations of the firm	150	4.78	0.87
Competitions facing the firm is analyzed during credit evaluation in our bank	150	3.44	0.78
Our Commercial bank analyses the current economic status affecting the firms during credit evaluation	150	4.05	0.65
Through conditions analyses facing the firm, our bank is able to determine how loans should be restructured.	150	3.91	0.70

*Source: Research data (2011)*

The study seeks to know the extent to which commercial bank analyze the condition facing the clients during credit evaluation. From the findings majority of the respondents strongly agreed to a very great extent that commercial bank analyze the purpose of the loan applied by the clients, commercial bank analyze the economic situation facing the firms and positive expectations of the firm as indicated by a mean of 4.87 and 4.78 with a standard deviation of 0.77 and 0.87. The study further found that most of the respondents agreed to a great extent that Commercial bank analyze the current economic status affecting the firms during credit evaluation, through conditions analyses facing the firm, their bank is able to determine how loans should be restructured, commercial bank analyze the amount of loan facility applied for in relations to specific use during credit

evaluation process as indicated by a mean of 4.05, 3.91 and 3.75 with a standard deviation of 0.65, 0,70 and 0.43. The study further found that most of the respondents agreed to a moderate extent that competition facing the firms is analyzed during credit evaluation in commercial bank as indicated by a mean of 3.44 with a standard deviation of 0.78. This indicates that commercial bank are using the prevailing conditions in the market in evaluating their clients credit worthiness.

#### 4.2.5 Character

**Table 4.5 Extent of agreeing with the following statements on the extent to which your commercial bank evaluates character of client during credit evaluation**

Statement	N	Mean	Std dev.
The motivation of the clients to repay loan obligation is crucial during credit evaluation in our bank	150	4.67	0.95
The client interview and client credit history is very important when determining the character of the clients during the credit evaluation	150	4.75	0.83
Our bank evaluate the quality of the references and the staff in the business of the client during credit evaluation	150	4.48	0.87
Our commercial banks investigate the client payment history, review a credit bureau report, and the experience in business for effective appraisal	150	4.30	0.78
Banks need to monitor carefully the risk-return profile of their lending portfolio to meet capital adequacy guidelines and to ensure long-term survival.	150	4.05	0.65

*Source: Research data (2011)*

The study ought to investigate the extent to which the respondents agreed, the commercial bank evaluates character of client during credit evaluation. From the findings, majority of the respondents strongly agreed to a very great extent that the client interview and client credit history is very importance when determining the character of the clients during the credit evaluation and that the motivation of the clients to repay loan obligation is crucial during credit evaluation in banks as indicated by a mean of 4.75, 4.67 with a standard deviation of 0.83 and 0.95. The study further found that most of the respondents agreed to a great extent that commercial bank evaluate the quality of the

references and the staff in the business of the client during credit evaluation and that commercial banks investigate the client payment history, review a credit bureau report, and the experience in business for effective appraisal and that banks need to monitor carefully the risk-return profile of their lending portfolio to meet capital adequacy guidelines and to ensure long-term survival as indicated by a mean of 4.48, 4.30 and 4.08 with a mean of 0.87, 0.78 and 0.65. This clearly indicates that the character of the clients is of great importance when commercial banks undertake evaluation of their clients.

#### 4.2.6 Coverage

**Table 4.6 Extent of using coverage in credit evaluation**

Statement	N	Mean	Std dev.
Our commercial bank analyze whether the firm is insured or not	150	3.97	0.77
Our commercial bank assess whether the business can meet the loan obligations during credit evaluation	150	3.86	0.68
Credit report are determined in evaluating the credit worthiness of the client in our bank	150	3.79	0.67

*Source: Research data (2011)*

The study sought to investigate the extent to which the commercial bank uses the coverage in credit evaluation. From the findings, most of the respondents agreed to a great extent that commercial banks analysis whether the firm is insured, that Credit reports are determined in evaluating the credit worthiness of the client in the bank or not and that the commercial bank assess whether the business can meet the loan obligations during credit evaluation as shown by a mean of 3.97, 3.86 and 3.79 with a standard deviation of 0.77, 0.68 and 0.67.

#### 4.2.7 The credit Evaluation and Non-performing loans

**Table 4.7 Extent of using the 6Cs during credit evaluation process in reducing the occurrence of non-performing loans for the commercial bank**

The six Cs	N	Mean	Std dev.
The capacity	150	4.11	0.97
Capital availability for the firm	150	4.27	0.96
Firms collaterals	150	3.67	0.98
The prevailing conditions, economic and market conditions	150	3.45	0.44
The coverage of the business	150	3.83	0.94
The character of the clients	150	3.42	0.77

*Source: Research data (2011)*

The study requested the respondents to indicate the extent to which the commercial banks use the 6Cs during credit evaluation process in reducing the occurrence of non performing loans for the commercial bank. From the findings most of the respondents agreed that commercial banks use capital availability for the firm, the capacity, the coverage that assessing whether the business and Firms collaterals as indicated by a mean of 4.27, 4.11, 3.83 and 3.67 with standard deviation of 0.96, 0.97, 0.94 and 0.98. The study further found that respondents agreed to a moderate extent that commercial banks uses the prevailing conditions, economic and market conditions and the character of the clients during credit evaluation process in reducing the occurrence of non performing loans as indicated by a mean of 3.45 and 3.42 with a standard deviation of 0.44 and 0.77.

**Table 4.8 Extent of use of the six Cs in credit evaluation led to decrease in non performing loans in commercial banks**

Statement	N	Mean	Std devt.
The commercial banks analyze the firm's ability to meet the loan payment	150	4.08	0.87
The capital available to firm is an indicator of how much the business should receive as loans	150	4.30	0.78
The Firms Collateral is a critical aspect in determining loan to be lender to firms to minimize the occurrence of non-performing loans for the banks.	150	4.25	0.95
The bank evaluate the purpose of the loans applied by the corporate firms to reduce the occurrence of non-performing loans	150	3.91	0.50
The commercial bank evaluate the credit reputation of the corporate firms for fair appraisal and minimize occurrence of non-performing loans for the banks	150	4.83	0.23
The commercial bank assess the coverage of the business when evaluating whether the firm will pay loan obligations thereby reducing occurrence of non-performing loans	150	3.67	0.83

*Source: Research data (2011)*

The study sought to find the extent to which the commercial banks uses the six Cs in credit evaluation led to decrease in non-performing loans. From the findings majority of the respondents strongly agreed that the commercial bank evaluate the credit reputation of the corporate firms for fair appraisal and minimize occurrence of non performing loans for the banks as indicated by a mean of 4.83 and supported by a standard deviation of 0.23. The study further found that most of the respondents agreed that the capital available to firm is an indicator of how much the business should receive as loans, the Firms Collateral is a critical aspect in determining loan to be lender to firms to minimize the occurrence of non-performing loans for the banks, the commercial banks analysis the

firm's ability to meet the loan payment as indicated by a mean of 4.30, 4.25 and 4.08 and supported by a standard deviation of 0.78, 0.95 and 0.87. The study further found that most of the respondents agreed to a moderate extent that bank evaluate the purpose of the loans applied by the corporate firms to reduce the occurrence of non-performing loans and that commercial bank assess the coverage of the business when evaluating whether the firm will pay loan obligations thereby reducing occurrence of non-performing loans as indicated by a mean of 3.91 and 3.67 with a standard deviation of 0.50 and 0.

**Table 4. 9 Non Performing Loans (In Millions) for the year 2008**

<b>BANKS</b>	<b>Millions.</b>
ABC bank	184
Bank of Africa	141
Bank of Baroda	416
Bank of India	259
Barclays Bank of Kenya	6582
CFC Stanbic	2966
Chase Bank	284
Citibank	129
City Finance Bank	55
Commercial Bank of Africa	1098
Consolidated Bank	695
Cooperative Bank of Kenya	6605
Credit Bank	213
Development Bank of Kenya	375
Diamond trust Bank	395
Dubai Bank	445
Eco Bank	2890
Equatorial commercial Bank	184
Equity Bank	2532
Family Bank	405
Fidelity Commercial Bank	118
Fina Bank	467
First Community Bank	0
Giro Bank	295
Guardian Bank	999
Gulf African Bank	0
Habib Bank	43
HFCK	1202
I&M Bank	1744
Imperial Bank	446
Kenya Commercial Bank	8591
K-rep Bank	1087
Middle East Bank	243
National Bank of Kenya	1970

NIC Bank	1032
Oriental Commercial Bank	453
Paramount universal Bank	234
Prime Bank	676
Standard chartered Bank	10

In the table indicate Non Performing Loans (In Millions) for the year 2008, This was clear indication the non-performing loans existed in commercial banks in Kenya with some banks facing a relative high non-performing loans such as Baclays bank of Kenya with 6582 Million, Kenya Commercial bank with 8591Millions shillings and Cooperative bank with 6605 Million shillings.



**The extent to which the commercial banks uses the 6Cs in credit evaluations. (Less extent-30% and 80% - to a very great extent)**

**Table 4.10 Uses the 6Cs in Credit Evaluations**

Banks	Capital	Collateral	Character	Capacity	Condition	Coverage
African Banking Corporation Ltd	75	50	90	95	60	30
Bank of Africa Kenya	60	52	85	96	65	25
Bank of Baroda (K) Ltd	40	42	95	90	62	56
Bank of India	67	60	86	90	60	50
Barclays Bank of Kenya Ltd	70	52	85	95	67	52
CFC Stanbic Bank Ltd	40	58	75	96	74	85
Transnational Bank	50	46	95	96	75	60
Chase Bank (K) Ltd	80	63	85	90	85	80
Citibank N.A. Kenya	45	51	80	96	75	85
Commercial Bank of Africa Ltd	30	75	90	98	76	40
Consolidated Bank of Kenya Ltd	45	52	85	96	84	50
Co-operative Bank of Kenya Ltd	52	50	86	86	75	40
Credit Bank Ltd	48	60	85	95	64	54
Development Bank Kenya Ltd	59	20	76	98	65	45
Delphis Bank	71	30	70	95	52	50
Diamond Trust Bank (K) Ltd	58	35	80	96	50	70
Dubai Bank of Kenya Ltd	58	25	95	90	53	60
Ecobank Kenya Ltd	42	30	96	90	51	80
Equatorial Commercial Bank Ltd	61	24	92	95	81	10
Equity Bank Ltd	40	04	92	96	50	20
Family Bank Ltd	59	05	85	92	54	20
Fidelity Commercial Bank Ltd	65	50	80	94	70	50
Fina Bank Ltd	52	80	95	96	50	40
United Bank of Africa Kenya Ltd	65	70	85	98	52	25
Giro Commercial Bank Ltd	63	90	90	92	45	42
Guardian Bank Ltd	42	50	86	98	70	64
Gulf African Bank Ltd	85	35	92	96	90	50
Habib Bank Ltd	76	25	92	94	68	42
Imperial Bank Ltd	51	15	80	96	90	50
I&M Bank Ltd	95	45	95	98	52	40
Jamii Bora Bank Ltd	15	65	86	90	50	15
Kenya Commercial Bank Ltd	25	57	92	96	52	40
K-rep Bank Ltd	45	56	96	95	52	35
Middle East Bank (K) Ltd	35	52	98	96	60	85
National Bank of Kenya Ltd	30	50	94	92	52	30
NIC Bank Ltd	25	52	92	90	40	52
Oriental Commercial Bank Ltd	48	40	90	80	42	60
Paramount Universal Bank Ltd	43	20	95	98	50	45
Prime Bank Ltd	45	30	85	86	85	30
Standard Chartered Bank (K) Ltd	58	35	76	85	20	25

The study sought to find out the extent to which Six Cs of credit evaluation is used in commercial banks. From the findings, majority of commercial banks use character and capacity in credit evaluation. For examples, 95% and 90 % of the respondents from African Banking Corporation Ltd indicated that capacity and character of the clients was used in credit evaluation to a very great extent. From the findings, 96% and 95% of the respondents from transnational bank indicated that the bank uses capacity and character of the client in credit evaluation to a very great extent. The study found that majority of the commercial bank uses capital and collateral to a great extent. From the findings, majority of the respondents from, I&M Bank Ltd Gulf African Bank Ltd, Chase Bank and African Banking Corporation Ltd (K) Ltd, 95 %, 85%, 80% and 75% indicated that they use capital to a great extent in evaluating credit worthiness of their clients. The study further found that majority of the commercial banks use coverage of the client during credit evaluation to a less extent. For example majority of the respondents 40% of Co-operative Bank of Kenya Ltd, 10% from Equatorial Bank and 20% of the respondents from Equity indicated that the bank use coverage to a less extent in evaluating their client. This clearly indicated that in the current competitive market, commercial banks are using character and capacity to a very great extent when evaluating creditworthiness of their clients. The study found that capital and collateral are used in evaluating clients but though not to a very great extent. It is also clear that majority of the commercial banks are using coverage and conditions to a less extent.

### **Regressions Analysis**

A multivariate regression model was applied to determine the relationship between credit evaluation practices and non performing loans for the commercial banks in Kenya. The regression model used in this model was:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6$$

Where Y= Depended variable, Non performing loan,  $\alpha$  = Constant,  $\beta$ = Coefficient of the factors, X<sub>1</sub>= Character, X<sub>2</sub>= Capital, X<sub>3</sub>= Capacity, X<sub>4</sub>= Conditions, X<sub>5</sub>= Collateral and X<sub>6</sub>= Coverage

**Table 4. 11: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.082(a)	.358	.518	0.24	1.741	5	.207	6.191	.001(a)

(a) Predictors: (Constant), Character, Capital, Capacity, Conditions, Collateral and Coverage

Dependent: Non performing loans

Adjusted R<sup>2</sup> is called the coefficient of determination and tells us how the non performing loans will varies with variation in credit evaluation practices which include Character, Capital, Capacity, Conditions, Collateral and Coverage. From table above, the value of adjusted R<sup>2</sup> is 0.358. This implies that, there was a variation of 35.8% of non performing loans varied with variation in credit evaluations practices which included character, capital, capacity, conditions, collateral and coverage at a confidence level of 95%.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.720(a)	.518	.418	.24313

*Source, Researcher (2011)*

**ANOVA (b)**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.841	6	.307	5.191	.001(a)
	Residual	1.714	29	.059		
	Total	3.556	35			

a Predictors: (Constant), character, capital, capacity, conditions, collateral and coverage

b Dependent Variable: Non performing loans

**Table 4.12: Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.000	.375		3.640	.001
	Character,	-3.971	.495	.857	2.931	.007
	Capital	-0.817	.646	.000	.000	1.000
	Capacity	-3.128	.428	.000	.000	1.000
	Conditions	-.571	.590	-.629	1.972	.058
	Collateral	-0.161	.429	.000	.000	1.000
	Coverage	-0.964	.601	.000	.000	1.000

a Dependent Variable: Non Performing loans

a Predictors: (Constant), character, capital, capacity, conditions, collateral and coverage.

The established regression equation was;

$$Y = 5.000 - 3.97 X_1 - 0.817X_2 - 3.128X_3 - 0.571X_4 - 0.161X_5 - 0.964X_6$$

Where  $X_1$ = Character,  $X_2$ = Capital,  $X_3$ = Capacity,  $X_4$ = Conditions,  $X_5$ = Collateral and  $X_6$ = Coverage

From the above regression model, it was found that non performing loans of the commercial would be at 5.000 when the organization do not apply or holding credit evaluation practices at constant, character, capital, capacity, conditions, collateral and coverage. A unit increase in character analysis would lead to a decrease in non performing loans of the commercial bank by factor of 3.971 , a unit increase in analysis of capital owned by the clients lead to an decrease in non performing loans by a factor of 0.817. The study also found that a unit increase in clients capacity assessment would result to an decrease in non performing loans of the commercial banks in Kenya by a factor of 3.128 while a unit increase in analysing prevailing market conditions would result to an decrease in non performing loans by factor of 0.571. The study further found that a unit increase in Collateral analysis would result to an decrease in non performing loans for the commercial banks by factor of 0.161 while a unit increase in coverage would lead to an decrease in non performing loans by a factor of 3.96. This clearly indicates that adoption of credit evaluation practices in evaluating credit worthiness of commercial banks clients has negative effects on non performing loans as indicated in the model below

$$Y = 5.000 - 3.97 X_1 - 0.817X_2 - 3.128X_3 - 0.571X_4 - 0.161X_5 - 0.964X_6$$

This implies that commercial banks management should emphasise on enhancing credit evaluation to reduces occurrence of non performing loans .The study further found that more emphasize should be put on evaluating the character of the clients, capacity and prevailing condition in evaluating credit worthiness as this reduces the occurrence of non performing loans for the commercial bank to a great extent.

## CHAPTER FIVE

### DISCUSSION, SUMMARY AND CONCLUSION

#### 5.1 Summary

From the findings, the study found that client ability to repay loan facility is of great concern during credit evaluation and that commercial banks appraisal should have a strategic analysis of the Applicant Corporation or firm in relation to market conditions and competitor behavior

On the application of capital available for the clients or corporate firms during credit evaluation, the study found that commercial bank adopt use of capital assessment during credit appraisal on the amount of cash invested in the business is of great importance. The study further found that most of the respondents were neutral on motivation to repay the loan or characters of the firm. The study further found commercial banks use collateral during credit evaluation respondents to a moderate extent.

The prevailing market conditions were found to be of great importance in credit evaluation. From the findings, Commercial bank analyze the current economic status affecting the firms during credit evaluation, through conditions analysis facing the firm, a bank is able to determine how loans should be restructured and determine the size of credit facility to give to the clients.

From the findings, credit history is very important when determining the character of the clients and the motivation of the clients to repay loan obligation during the credit evaluation in commercial bank. The study further found that commercial bank evaluates the quality of the references and the staff in the business of the client during credit evaluation and that commercial banks investigate the client payment history, review a credit bureau report, and the experience in business for effective appraisal and that banks need to monitor carefully the risk-return profile of their lending portfolio to meet capital adequacy guidelines and to ensure long-term survival.

From the findings, it was found out that commercial banks analyze whether the firm is insured, Credit reports are determined in evaluating the credit worthiness of the client in

the bank or not and that the commercial bank assess whether the business can meet the loan obligations during credit evaluation

From the findings, that commercial banks use capital availability for the firm, the capacity, the coverage that assessing whether the business in and Firms collaterals during credit evaluation process in reducing the occurrence of non performing loans for the bank.

From the findings, commercial banks uses the six Cs in credit evaluation led to decrease in non performing loans. The bank evaluates the credit reputation of the client and corporate firms for fair appraisal and minimize occurrence of non performing loans for the banks, the capital available to firm is an indicator of how much the business should receive as loans, the Firms Collateral is not critical aspect in determining loan to be lender to firms to minimize the occurrence of non performing loans for the banks, but the commercial banks analysis the firm's ability to meet the loan payment. Further findings showed that bank evaluates the purpose of the loans applied by the corporate firms to reduce the occurrence of non performing loans and that commercial bank assess the coverage of the business when evaluating whether the firm will pay loan obligations thereby reducing occurrence of non performing loans

From the findings, majority of commercial banks use character and capacity in credit evaluation. For examples, 95% and 90 % of the respondents from African Banking Corporation Ltd indicated that capacity and character of the clients was used in credit evaluation to a very great extent. This implies that the motivation of the borrower to repay a debt obligation. It is unlike any other financial performance indicator found in the financial statements. Commercial banks determining character is a judgment call derived from careful interviewing of the applicant and study of the applicants' historical credit reputation. From the findings, majority of the respondents from, I&M Bank Ltd Gulf African Bank Ltd, Chase Bank and African Banking Corporation Ltd (K) Ltd, 95 %, 85%, 80% and 75% indicated that they use capital to a great extent in evaluating credit worthiness of their clients. The study further found that majority of the commercial banks use coverage of the client during credit evaluation to a less extent. For example majority of the respondents 40% of Co-operative Bank of Kenya Ltd, 10% from Equatorial Bank and 20% of the respondents from Equity indicated that the bank use coverage to a less

extent in evaluating their client. This implies that the current competitive market, commercial banks are using character and capacity to a very great extent when evaluating creditworthiness of their clients. The study found that capital and collateral are use in evaluating clients but though not to a very great extent. It is also clear that majority of the commercial banks are using coverage and conditions to a less extent.

The study found that commercial banks management should emphasise on enhancing credit evaluation to reduce occurrence of non performing loans .In credit evaluation the character of the clients, capacity and prevailing condition should be given priorities as this will enable to the commercial banks management whether the clients will be in a positions of clearing the loan facilities in times. The adoption of credit evaluation practices in evaluating credit worthiness of commercial banks clients has negative effects on non performing loans as indicated in the model below

$$Y = 5.000 - 3.97 X_1 - 0.817X_2 - 3.128X_3 - 0.571X_4 - 0.161X_5 - 0.964X_6$$

## 5.2 Conclusion

From the findings, the study concluded that client ability to repay loan facility is of great concern during credit evaluation and that commercial banks appraisal should have a strategic analysis of the applicant Corporation or firm in relation to market conditions and competitor behavior.

The study concludes that capital available for the clients or corporate firms during credit evaluation is of great importance during credit evaluation. The prevailing market conditions were found to be of great importance in credit evaluation. From the findings, Commercial bank analyses the current economic status affecting the firms during credit evaluation, through conditions analyses facing the firm, a bank is able to determine how loans should be restructured and determine the size of credit facility to give to the clients.

The study further concludes that the character of the clients is of great importance .The study clearly indicate credit history is very important when determining the character of the clients during the credit evaluation and that the motivation of the clients to repay loan obligation. The quality of the references, client payment history, review a credit bureau



report, and the experience in business for effective appraisal and risk-return profile of their lending portfolio are used in determining the character of the clients.

From the findings, the study further conclude that use of capital available for the firm, the capacity, the coverage, collaterals during credit evaluation process plays a big role in reducing the occurrence of non performing loans for the bank.

From the findings, the study concludes that firm's collateral is a not critical aspect in determining loan to be lend to clients but client's ability to meet the loan payment is of great importance. Banks need to evaluate the purpose of the loans applied by the corporate firms to reduce the occurrence of non performing loans and that commercial bank assess the coverage of the business when evaluating whether the firm will pay loan obligations thereby reducing occurrence of non performing loans.

The study finally concludes that determining character and capability is the most critical aspects in credit evaluation .This call for judgment derived from careful interviewing of the applicant and study of the applicants' historical credit reputation. The current competitive market and character are greatly important in evaluating creditworthiness of their clients.

This concluded that adoption of credit evaluation practices in evaluating credit worthiness of commercial banks clients has negative effects on non performing loans. This implied that commercial banks management should emphasise on enhancing credit evaluation to reduce occurrence of non performing loans .The study further conclude that more emphasize should be made on evaluating the character, capacity and condition in evaluating credit worthiness as these reduces the occurrence of non performing loans.

### **5.3 Recommendations**

The study recommends that firms collateral and capital are critical to a great extent in determining loan to be lender to their clients but client's ability to meet the loan payment is of great importance by evaluating the purpose of the loans applied by the clients and corporate firms to reduce the occurrence of non performing loans The study recommends that commercial bank should use character and capability in credit evaluation. Clients' historical credit reputation and motivation to repay the loan facility should be assessed

extensively as this will enable the commercial bank be in a position of offering credit to the right client.

The study recommends that commercial banks should not focus on conditions prevailing in the market as well as the coverage of the clients and the business in credit evaluation. The client business can still do well in the current market and so long as the motivation and capability of the client are of quality, commercial bank should not be hesitating in offering credit facilities. This will enable client to service their loan facility and prevent occurrence of non performing loans.

The study further recommends that commercial banks of Kenya should emphasize more on evaluating the character, capacity and capital in credit evaluations to lower occurrence of non performing loans.

#### **5.4 Recommendation for further study**

“The relationship between credit evaluation and non-performing loans in commercial banks in Kenya”. Further study should be undertaken to determine the relationship between credit evaluation and financial performance of commercial banks in Kenya .A study should also be carried out to determine the effects of credit evaluation on the level on non performing loans in SACCOs and Microfinance.

## REFERENCES

- Agung, Juda et.al, ( 2001) .*Credit Crunch in Indonesia in the Aftermath if the Crisis Facts, Causes and Policy Implications*. Directorate of Economic Research and Monetary Policy, Bank of Indonesia, March - April.
- Anangwe (2004). A Survey of the Lending Practices Of Financial Institutions To The Agricultural Sector In Kenya. *Unpublished MBA Research Project* .University of Nairobi
- Athanassopoulos, A.D & Giokas, D. (2000).*The use of data envelopment analysis in banking institutions*. Evidence from the commercial bank of Greece. *Interfaces*, Vol. 30 No.2, pp.81-95.
- Auronen, L. (2003). Asymmetric information: theory and applications", paper presented at the Seminar of Strategy and International Business, Helsinki University of Technology, Helsinki, May, .
- Bank of Japan, (2003) .*Review of On-site Examination Policy in Fiscal 2002 and Plans for Fiscal 2003*, Online, Available Retrived June15 2010.
- Bebchuk, L.A. & JM Fried (2006), The Uneasy Case for the Priority of Secured Claims in Bankruptcy, 105 Yale L. J. 857.
- Berg, S., Forsund, F., Hjalmarsson, L & Suominen, M. (1993).Banking efficiency in the Nordic countries.*Journal of Banking & Finance*, Vol. 17 No.1, pp.371-88.
- Berger, Allen N. & Gregory F. Udell(2000), Collateral, Loan Quality, and Bank Risk, 25 J. Monetary Econ. 21- 42
- Besanko, D,Dranove, D& Shanley, M. (1996).*Economics of Strategy*, Wiley, New York, NY.
- Bester, H. (2004).The role of collateral in a model of debt renegotiation, *Journal of Money, Credit and Banking*, Vol. 26 No.1, pp.72-86

- Binks, M.R., Ennew, C.T. (1997).The relationship between UK banks and their small business customers.*Small Business Economics*, Vol. 9 No.2, pp.167-78.
- Bofondi, M., Gobbi, G. (2003). *Bad Loans and Entry in Local Credit Markets*, Bank of Italy Research Department, Rome.
- Boot, A.W.A. & A.V. Thakor(2004), *Moral Hazard and Secured Lending in an Infinitely Repeated Credit Market Game*, 35 Int'l Econ. Rev. 899-920 .
- Booth, James R.(2002), Contract Costs, Bank Loans and the Cross-Monitoring Hypothesis, 31 J. Fin Econ. .
- Boucher, J. (1996).Management maximizing loan officer productivity with sales analysis. *Commercial Lending Review*, Vol. 11 No.1, pp.89-94.
- Brickly, J.A., Smith, C.W. Jr, Zimmerman, J.L. (2001). *Managerial Economics and Organizational Architecture*, 2nd ed., McGraw-Hill, New York, NY, .
- Campbell, T.S., 1978, A model of the market for lines of credit, *Journal of Finance* 33,231-244.
- Central Bank of Kenya, (2002), *Bank Supervision Report, Nairobi*
- Central Bank of Kenya, (2003), *Inflation, Monthly Economic Review, Nairobi.*
- Central Bank of Kenya, (2009), *Inflation, Monthly Economic Review, Nairobi.*
- Chan, Y & A Thakor (2007), Collateral and Competitive Equilibria with Moral Hazard and Private Information, 42 J. Fin. 345-1504.
- Cheron, E.J., Boidin, H., Daghfous, N. (1999).Basic financial services of low-income individuals: a comparative study in Canada. *International Journal of Bank Marketing*, Vol. 17 No.2, pp.49-60.

- Deakins, D., Hussain, G. (1991). *Risk Assessment by Bank Managers*, University of Central England, Birmingham. Financial Crisis." *IMF working paper 00/33*, March: 2-5.
- Golany, B., Storbeck, J.E. (1999). A data envelopment analysis of the operational efficiency of bank branches. *Interfaces*, Vol. 29 No.3, pp.14-26.
- Grasing, R. (2002). Measuring operational efficiency. A guide for commercial bankers", *Commercial Lending Review*, Vol. 17 No.1, pp.45-52.
- Ham, J.C. and A. Melnik(2007), Loan demand: An empirical analysis using micro data, *Review of Economics and Statistics* 69,704-709.
- Hanazaki, Masaharu and Horiuchi, Akiyoshi ( 2002). A Review of Japan's Bank Crisis from the Governance Perspectives. *Pacific-Basin Finance Journal*, 11(3): 305-325.
- Harris, Steven L., & Charles W. Mooney Jr (2004), A Property-Based Theory of Security Interests: Taking Debtors' Choices Seriously, 80 Va. L. Rev. 2021 (1994).
- Hempel, G.H., Simonson, D.G. (1999). *Bank Management: Text and Cases*, 5th ed., Wiley, New York, NY .
- International Monetary Fund (IMF) (2008). Code of Practices on Fiscal Transparency: Declaration on Principles. *Washington DC. IMF*,
- Johnson, F.P., Johnson, R.D. (1985). *Commercial Bank Management*, Dryden Press, Chicago, IL, .
- Kithinji, A and Waweru. N.M. (2007). Merger Restructuring and Financial Performance of Commercial banks in Kenya. *Economic, Management and Financial Markets Journal*, 2 (4), 9-39
- Koch, T.W., MacDonald, S.S. (2000). *Bank Management*, The Dryden Press/Harcourt College Publishers, Hinsdale, IL/Orlando, FL, .

- Krueger, Anne O., & Aaron Tornell, (1999) .The Role of Bank Restructuring in the Recovery from Crises: Mexico 1996 – 98”, *NBER Working Paper* No. 7042.
- Luckett, C.A. (1988).Personal bankruptcies. *Federal Reserve Bulletin*, No.September, pp.591-603.
- McColgan, P., (2001), Agency theory and corporate governance: *a review of the literature from a UK perspective*,
- Mikiko, F., (2003), Mounting Weigh Heavily on Bank Management; Stock Prices Continue to Fall, China, and the United, 2<sup>nd</sup> Editions, New York.
- Mokogi (2003). Economic Implications Of Lending Of Micro Finance Institutions On Mses
- Morgan, D., (2007) Bank credit commitments and credit rationing, Working paper, Federal Reserve Bank of Kansas City, March.
- Perro, V.C& Ruoff, S.C. (1997). Improving accountability in banking", *Commercial Lending Review*, Vol. 12 No.3, pp.44-50.
- Reddy, K., (2002), A Comparative Study on NPLs in India in the Global Context, Resolution of Banking Crises: Retyrived Online, [www.crisil.com/](http://www.crisil.com/), Accessed, on 23 June 2010
- Rose, P.S. (1991). *Commercial Bank Management: Producing and Selling Financial Services*, Irwin, Homewood, IL.
- Ruthernberg, D., (2003), *Bad Loans and Entry in Local Credit Markets*
- Schuler, R.S& Jackson, S.E. (1996). *Human Resource Management: Positioning for 21st Century*, West, St Paul, MN.
- Seminar Paper, Bangladesh Institute of Bank Management, January: 21-54.  
September: 13-27.

- Sherman, H.D., Gold, F. (1985). Bank branch operating efficiency: evaluation with data envelopment analysis. *Journal of Banking & Finance*, Vol. 9 No.2, pp.297-315.
- Shioraki, J., (2002) .*The East Asian Crisis: Origins, Policy Challenges, and Prospects* (The world Bank Group).
- Weaver, P.M. (1994). *Banking and Lending Practic*. Serendip Publications, Hornsby .
- Westermann, Frand , (2003).The credit Crunch: A Comparison of Germany and Japan. *CSEifo Forum* 2003 No.1, 2003.
- Williamson, David. 2000. "Two Approaches to Resolving Nonperforming Assets during
- Woo, David ( 2000).Two Approaches to Resolving Nonperforming Assets during Financial Crisis. IMF working paper 00/33, March: 2-5.
- Zenios, C.V., Zenios, S.A., Agathocleous, K., Soteriou, A.C. (1999), "Benchmarks of the efficiency of bank branches", *Interfaces*, Vol. 29 No.3, pp.37-51.

## APPENDICES

### Appendix 1: Letter of Introduction

Dear Respondent,

RE: Support on MBA Proposal

I am an MBA student at University of Nairobi and in my final year of study. As part of the requirement for graduation, I'm undertaking a research on the relationship between the credit Evaluation and non performing loans in commercial banks.

In this regard, I'm kindly requesting for your support in terms of time, and by responding to the attached questionnaire. Your accuracy and candid response will be critical in ensuring the objectives of the research are met. It will not be necessary to write your name on this questionnaire and for your comfort, all information received will be treated in strict confidence.

The findings of the study will surely be used for research purposes and to enhance knowledge in the field of lending policies. If need be the research report may be presented to your organization for information and record.

Thank you in advance

Yours faithfully

Patrick Kamore Kamau



## Appendix 11: Questionnaire

### Capacity

1. To what extent do you agree with the statement concerning application of capacity of the client during credit evaluation? (1-means strongly disagree, 2-disagree, 3-neutral, 4-agree and 5- strongly agree).

Statement	1	2	3	4	5
Client ability to repay loan facility is of great concern during credit evaluation					
Cash flow stamen is crucial during client assessment on repayment of loans					
Timing of loan repayment is determined when analyzing the capacity of the clients					
Commercial banks evaluates the company ability to manage working capital to cash					
Commercial banks appraisal should have a strategic analysis of the applicant corporation or firm in relation to market conditions and competitor behavior					

### Capital

2. To what extent do you agree with the statement concerning application of capital available for the clients or corporate firms during credit evaluation? (1-means strongly disagree, 2-disagree, 3-neutral, 4-agree and 5- strongly agree).

Statement on use of capital during credit Evaluation	1	2	3	4	5
The amount of cash invested in the business is of great importance during credit evaluation in our bank					
Through business capital evaluation, our commercial bank is able to determine how much to offer for loans					
strong business equity enables our commercial bank to offer loans to our clients as it ensure the client remain committed to the business					
Motivation to repay the loan or characters of the firm					
Our commercial bank adopt use of capital assessment during credit evaluation to a very great extent					

**Collateral**

3. To what extent does your commercial banks use during credit evaluation for your client?

- i. Very great extent [ ]
- ii. Great extent [ ]
- iii. Moderate extent [ ]
- iv. Less extent [ ]
- v. No extent [ ]

Explain you answer

.....  
 .....  
 .....

**Conditions**

4. To what extent does your commercial analyze the condition facing your clients during credit evaluation? (1-means No extent, 2-low extent, 3-neutral, 4-great extent and 5-very great extent).

Statement	1	2	3	4	5
Our commercial bank analyses the purpose of the loan applied by our clients					
Our commercial bank analyses the amount of loan facility applied for in relations to specific use during credit evaluation process					
Our commercial bank analyses the economic situation facing the firms and positive expectations of the firm					
Competitions facing the firms is analyzed during credit evaluation in our bank					
Our Commercial bank analyses the current economic status affecting the firms during credit evaluation					
Through conditions analyses facing the firm, our bank is able to determine how loans should be restructured.					

### Character

5. To what extent do you agree with the following statements concerning the extent to which your commercial bank evaluates character of client during credit evaluation? (Where 1-Not at all, 2-Less extent, 3-Moderate Extent, 4 –Great extent and 5 -Very Great extent)

Statement	1	2	3	4	5
The motivation of the clients to repay loan obligation is crucial during credit evaluation in our bank					
The client interview and client credit history is very importance when determining the character of the clients during the credit evaluation					
Our bank evaluate the quality of the references and the staff in the business of the client during credit evaluation					
Our commercial banks investigate the client payment history, review a credit bureau report, and the experience in business foe effective appraisal					
Banks need to monitor carefully the risk-return profile of their lending portfolio to meet capital adequacy guidelines and to ensure long-term survival.					

### Coverage

6. To what extent does the use of coverage in credit evaluation? (Where 1-Not at all, 2-Less extent, 3-Moderate Extent, 4 –Great extent and 5 -Very Great extent)

Statement	1	2	3	4	5
Our commercial banks analysis whether the firm is insured or not					
Our commercial bank assess whether the business can meet the loan obligations during credit evaluation					
Credit report are determined in evaluating the credit worthiness of the client in our bank					

### The credit Evaluation and Non-performing loans

7 To what extent does your bank uses the 6Cs during credit evaluation process in reducing the occurrence of non performing loans for the commercial bank (Where 1-Not at all, 2-Less extent, 3-Moderate Extent, 4 –Great extent and 5 -Very Great extent).

The six Cs	1	2	3	4	5
The capacity					
Capital availability for the firm					
Firms collaterals					
The prevailing conditions, economic and market conditions					
The coverage that assessing whether the business in					
The character of the clients					

8 To what extent does the use of the six Cs in credit evaluation led to decrease in non performing loans in commercial banks? (Where 1-Not at all, 2-Less extent, 3-Moderate Extent, 4 –Great extent and 5 -Very Great extent)

Statement	1	2	3	4	5
The commercial banks analysis the firm's ability to meet the loan payment					
The capita; available to firm is an indicator of how much the business should receive as loans					
The Firms Collateral is a critical aspect in determining loan to be lender to firms to minimize the occurrence of non performing loans for the banks.					
The bank evaluate the purpose of the loans applied by the corporate firms to reduce the occurrence of non performing loans					
The commercial bank evaluate the credit reputation of the corporate firms for fair appraisal and minimize occurrence of non performing loans for the banks					
The commercial bank assess the coverage of the business when evaluating whether the firm will pay loan obligations thereby reducing occurrence of non performing loans					

### **Appendix III: List of Commercial Banks in Kenya**

1. African Banking Corporation Ltd
2. Bank of Africa Kenya
3. Bank of Baroda (K) Ltd
4. Bank of India
5. Barclays Bank of Kenya Ltd
6. CFC Stanbic Bank Ltd
7. Charterhouse Bank Ltd (Under- Statutory management)
8. Chase Bank (K) Ltd
9. Citibank N.A. Kenya
10. Commercial Bank of Africa Ltd
11. Consolidated Bank of Kenya Ltd
12. Co-operative Bank of Kenya Ltd
13. Credit Bank Ltd
14. Development Bank Kenya Ltd
15. Delphis Bank
16. Diamond Trust Bank (K) Ltd
17. Dubai Bank of Kenya Ltd
18. Ecobank Kenya Ltd
19. Equitorial Commercial Bank Ltd
20. Equity Bank Ltd
21. Family Bank Ltd
22. Fidelity Commercial Bank Ltd
23. Fina Bank Ltd
24. First Community Bank Ltd
25. Giro Commercial Bank Ltd
26. Guardian Bank Ltd
27. Gulf African Bank Ltd
28. Habib Bank Ltd
29. Imperial Bank Ltd
30. I&M Bank Ltd

31. Jamii Bora Bank Ltd
32. Kenya Commercial Bank Ltd
33. K-rep Bank Ltd
34. Middle East Bank (K) Ltd
35. National Bank of Kenya Ltd
36. NIC Bank Ltd
37. Oriental Commercial Bank Ltd
38. Paramount Universal Bank Ltd
39. Prime Bank Ltd
40. Standard Chartered Bank (K) Ltd
41. Trans National Bank Ltd
42. United Bank of Africa Kenya Ltd.
43. Victoria Commercial Bank Ltd