THE EFFECT OF 7C<sup>S</sup> CREDIT APPRAISAL MODEL ON THE LEVEL OF NON-PERFORMING ADVANCES OF COMMERCIAL BANKS IN KENYA:

# BY:

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A RESARCH PAPER SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF BUSINESS ADMINISTRATION DEGREE, SCHOOL OF BUSINESS UNIVERSITY OF NAIROBI.

# **DECLARATION:**

This research project is my original	work and has not been presented in
any other university.	
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# **DEDICATION:**

To my son and daughters, who have been a source of inspiration in my studies.

To all those who made this project a success in one way or the other.

#### **ACKNOWLEDGEMENT:**

I sincerely acknowledge and give glory and honor to the Almighty God. I confess that I see the hand of God in my entire studies.

I also acknowledge the tireless effort of my supervisor madam Angela Kithinji, who has been instrumental in ensuring that this paper receives the desired correction hence bringing it to this status.

Special thanks to my wife Eunice, my daughters: Beril and Mitchell and my son Elly who had to withstand the tough economic times to allow me pursue my studies.

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#### **ABSTRACT**

Banks play a significant role in the economic growth and development of any country. They are the main stimulus of economic growth. However, they face several challenges. The main one being, disbursement of funds in quality assets (loans and advances). This study is geared towards ascertaining the following objectives: whether, banks use the 7Cs credit appraisal model and the impact/effect of the use of this model on the level of non performing loans of commercial banks of Kenya.

The study was conducted through a survey on the 43 commercial banks registered and operating in Kenya. The study covered the entire banking industry in Kenya hence no sampling was required. Data was collected using a semi-structured questionnaire administered to bank managers. The data collected was analyzed by ratios, inferential and quantitative statistics. SPSS version 17 was used in capturing and building the data and thereafter analyzed through the use of factor analysis. The findings of the study was that; commercial banks in Kenya use the 7Cs credit appraisal model in credit risk, evaluation, assessment and appraisal processes.

To remain formidable in business, commercial banks should use the 7Cs credit appraisal model considering that, credit risk is the major risk that banks attach a lot of importance to. It should be noted that most bank failures worldwide have been attributed to poor credit policies they have employed in their businesses. Commercial banks in Kenya use the 7Cs credit appraisal model in credit risk assessment, evaluation and appraisal processes and the use of the 7Cs credit appraisal model has enabled them to reduce the level of non performing loans. Capacity was found to be the most significant of all the credit appraisal variables followed by character, condition, common sense and control in that order.

#### CHAPTER ONE

#### INTRODUCTION

### 1.1 Background to the study

A strong and vibrant banking sector is important for a flourishing economy. Failure of the banking sector has adverse impacts on other sectors of the economy too. Non performing advances are of major concern for commercial banks in Kenya. A non performing advance is a loan/advance whose principle and interest is in arrears for a period in excess of ninety days. Non performing advances reflect the performance of commercial banks in the country. A high level of non performing advances is an indicator of the presence of many credit defaults that affect the profitability and net worth of banks and they erode the value of their assets .The growth of non performing advances calls for provisions which reduces the overall profits and returns to shareholders. The issue of non performing loans has been a subject of discussion at lengths amongst financial systems worldwide (Krishna, 2004). The problem of non performing advances not only affects banks but also the entire economy. Infact a high level of non performing loans is nothing but a reflection of the state of health of the industry and trade in a country.

This research seeks to understand the theories of credit management, non performing advances and the effect of the use of the 7C credit appraisal model on the level of non performing advances of commercial banks in Kenya.

Credit risk is defined as the potential that the borrowers will fail to honor the obligation of repaying the loans in accordance with the agreed terms when the loan was disbursed. The main goal of credit management is to maximize the banks risk adjusted rate of return, through ensuring that credit exposure is kept within the acceptable norms (Sinkey, 1992). Extending loans to businesses and individuals involves taking risks to earn high returns. Banks use loans to cross sell other fee earning services. There are a number of factors that can lead to loan defaults these include: industry decline as a result of the general economic trends, firms' specific problems that may arise from changing technological trends, industrial actions by the union movements and shifts in business cycle as individual incomes rise or fall (MacDonald ,et al, 2006).

There is need for commercial banks to manage the credit risk encompassed in the entire portfolio of advances and that in individual credit transactions. They should determine the relationship between credit risk and other risks. Effective management of credit risk is a crucial component of a comprehensive approach to risk management and an essential ingredient to banks long-term survival. Loans granted by Commercial Banks are the largest and most obvious source of credit risk in so far as other sources of risk exist throughout their operations. The other sources of risk include: the banking and trading books and the on and off-balance sheet items. Other than loans, Commercial banks face credit risk in other financial instruments such as: acceptances, interbank transactions, trade financing, foreign exchange transactions, financial futures, swaps, bonds, equities, options and in extension commitments, guarantees and settlement transactions (Butter Worths, 1990).

The fact that exposure to credit continues to be a major problem to banks worldwide, banks and their supervisors should draw lessons from the experience others have gone through and what they have gone through too. They should be keen in identifying, measuring, monitoring and controlling credit risk and ensure that they hold adequate capital against these risks and are adequately compensated for risks incurred, (Basel

,1999). A further example of credit risk relates to the process of settling financial transactions. Where one side of the transaction is settled, and the other fails, a loss may occur which is equivalent to the principal amount of the transaction. In the event whereby one party is late in settling, the other party may incur a loss in relation to missed investment opportunities. Settlement risk hence includes elements of: liquidity, market, operational and credit risk. The level of risk is determined by particular arrangements put in place for settlement. Factors in such arrangements that have a bearing on credit risk include: the timing of the exchange of value, settlement finality and the role of intermediaries and clearing house (Edwards , 1997).

Extending credit is a long journey whose success depends on the methods used in evaluation and awarding it. The journey commences from application for credit and terminates with the time the credit is fully paid. Like any other journey undertaken by human beings, the credit management process has its smooth and rough terrains before one gets to the final destination. There is need therefore, to control credit for any success in the accomplishment of the journey to be realized (Clarke, et al, 1999). The most important concern to commercial banks is not to be overwhelmed by marketing or professionally cited reasons when booking a loan but to take the risk reward aspects into consideration. Banks should not only consider the business upswing but also: the downturn swing the borrower may find him or herself in. Further more, banks place a great emphasis on outdated financial statements that is further exacerbated by the fact that a descriptive rather than an analytical approach to credit is taken. Hence a forward looking strategy need to be adopted since the loan will primarily be repaid from future cash flows but not historic performance, nevertheless both can provide good repayment indicators (Ahmed, 2008).

#### 1.2 Statement of the Problem

World over, credit has proved to be the most critical of all risks faced by banking institutions. A study of bank failures in New England found that, of the 62 banks in existence before 1984, which failed from 1989 to 1992 in 58 cases it was observed that loans and advances were not being repaid in time (Sabrani, 2002).

Conversely, since 1986 there have been 39 bank failures in Kenya .One of the most crucial causes attributed to these failures is, the high incidence of non-performing loans. Apart from the management failure through instituting poor lending practices, some blame must be borne by the borrowers, especially their failure to repay their loans as per the terms and conditions in the initial agreement. The sudden and unexpected closure of banks comes with some costs. Losses accrue to the shareholders, depositors, unsecured creditors and the deposit insurer. What makes banks failure more crucial particularly for public policy, is the fear that the failure may spill over to other banks and even possibly to the financial system as a whole, the domestic macro economy and other countries. This is because banks are closely intertwined financially with each other through lending and borrowing from each other, holding deposit balances with each other and the payments clearing system. Failure of any of one bank may spill over to other banks more quickly (Kaufman, 1995). Central bank through the prudential guidelines issued to institutions licensed under the Banking Act cap 488 provides tough remedial and punitive administrative sanctions on banks that fail to adhere to specific loan and advances requirements. It is on this premise that banks adopted proper credit assessment evaluation and appraisal measures. The 7Cs credit appraisal model: character, capacity, collateral, contribution, control, condition and common sense has elements that comprehensively cover the entire areas that affect risk assessment and credit evaluation.

Research/study on non performing advances is not a new phenomenon. Kabiru (2002) undertook a study on the relationship between credit risk assessment and the level of non performing loans of commercial banks in Kenya. He looked at some key factors that influence credit decision among which included: reputation/character, leverage/capacity, volatility in earnings/condition and collateral; (4Cs of credit risk assessment) that were borrowers' specific factors and the business cycle and the level of interest that were market specific factors. In his study he did not look at: control, contribution and common sense that are also among the key factors influencing credit decisions. Mutwiri (2003) carried out a study on the use of 6Cs credit appraisal model and its relationship with the level of non performing loans of commercial banks in Kenya, The objective of the study was to establish the importance of the use of the 6Cs (character, contribution, capacity, collateral, condition and common sense) and establish whether the use the 6Cs in credit evaluation, assessment and appraisal had some impact on the level of non performing loans of commercial banks. However in his study, he did not take into consideration control which is an important factor in credit evaluation, appraisal and assessment. Islam et, al (2003) in their paper entitled non performing loans -its causes, consequences and some learning experiences in Bangladesh, dealt with non performing loan situations, basically; the causes and consequences. They pointed out the possible steps to handle the situation these included: improved law and order, motivation, where awards could be arranged for the best loan performers, use of recovery agency to collect bad and doubtful debts, less relaxation on the side of banks in loan recovery, development of specific situation model/condition where professional management can be used to develop situation that may help to deal with different situations differently, real timing/control bank staff to be trained so as to handle situations competently, trade off where every bank designs its own investment especially where default is portfolio in areas less, proper

monitoring/character banks should ensure periodic monitoring so that borrowers can not reveal any weakness from the banks side. In this study the focus was on the 3Cs of credit risk appraisal. Islam et al did not consider capacity, collateral, common sense and contribution as possible steps that could be adopted to handle the problem of non performing loans Waweru (2009) undertook a study on the commercial bank crises in Kenya causes and remedies. The study focused on the causes of non performing loans and the steps banks have taken to mitigate the problem. The findings of the study were that: national economic downturn was perceived to be the most important external factor that cause non performing advances/condition, Customer Failure to disclose vital information during loan application/character was considered to be the main customer specific factor and lack of an aggressive debt collection policy/control, he focused on 4Cs of credit evaluation and assessment. Waweru did not focus on capacity to repay, collateral, common sense and contribution as factors that can help in mitigation of the problem. This study focuses on the effect of the use of the 7Cs (character, capacity, contribution, collateral, condition, common sense and control) credit appraisal model on the level of non performing advances of commercial banks in Kenya.

## 1.3 Research Questions

The following are the research questions that the study aims to address:

- 1) To what extent has the 7Cs credit appraisal model been applied by commercial banks in Kenya?
- 2) What have been the effects of using the 7Cs credit appraisal model on the level of non performing advances of commercial banks in Kenya?
- 3) Which policy measures should be put in place to enhance the use and effectiveness of the 7Cs credit appraisal model on credits advanced by commercial banks in Kenya?

# 1.4 Objectives of the study

- 1) To ascertain the use of the 7Cs credit appraisal model by commercial banks in Kenya.
- 2) To determine the effects of the use of the 7Cs credit appraisal model on the level of non performing advances of commercial banks in Kenya.

# 1.5 The significance of the study

This study will provide banks with information that will enable Credit managers conduct credit risk assessment with prudence and cultivate the interest of researchers to study more in the area of credit risk assessment.

The study will enhance the credit review and recommendations on credit management by the banks supervisory department of the Central Bank of Kenya to commercial banks

The study will enable the tax authorities understand the causes of non performing loans that lead to leakages in tax revenue and advance appropriate remedies.

The study may encourage the government to fund research in this area that is a threat to the economic growth and development of the country.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

Financial stability is considered as sine qua non of sustained and rapid economic progress. Non performing loans assume a critical importance since it reflects on asset quality, credit risk and efficiency in resource allocation. A common perspective has been that the problem of non performing loans is attributed to political, social, economic, technological, legal and environmental factors across countries. With numerous reforms in the financial sector induced by rapid increase in the pace of globalization, advances in technology and structural reform programs, government intervention in credit market has eased considerably. Advances in technology has facilitated rapid exchange of information across markets, creation of fewer financial products and enhanced efficiency in operation subsequently strengthening financial institutions and countries have adopted international best practices pertaining to banking and financial sector (Bhide, et al.2002).

Commercial banks generally serve as financial intermediaries through mobilization of resources from surplus economic units to deficit economic units within the economy. To achieve the profitability objective, banks have a risk to manage this mainly relates to non performing loans (Carprio et, al, 1999). Non performing advances reduces the liquidity of banks, impair credit expansion and has a dire consequence on the overall performance of banks, the firm that defaulted and the economy. It should be noted that lending is all about creation and management of risk assets. Effective management of a lending portfolio requires an articulated lending policy that sets out the banks lending philosophy, objectives, including modalities for implementation, monitoring, appraisal and review of credit

facilities. Well conceived lending practices are vital in facilitating an efficient credit system. The success of the bank entirely depends on the ability of the management to mitigate it against risks through adoption of sound risk management practices. Effective management of loans portfolio has been a problem in the banking industry. Many bank failures have ensued from poor management of their lending portfolios hence they find it difficult to meet their obligation to clients and owners which could render them insolvent (Kassim, 2002).

## 2.2 Risks of Commercial Banks

The past decade has seen banks make huge losses. Companies that had been seen to be performing well suddenly announced big losses due to credit exposures that turned sour and interest rate positions taken. In response commercial banks embarked on upgrading their risk management and control systems (Santomero, 1997).

Pyle (1997) in his paper entitled Bank risk management theory, defined risk as the reduction in the firm value due to changes in the business environment. The major sources of value loss are identified as, market risk, credit risk, operational risk and performance risk. Risk may also be defined as, a combination of specific hazard and the likelihood that the hazard can occur in future though; such hazards can be mitigated rather than present problems that must be immediately addressed.

That likelihood of risk occurring can be expressed as a rate of probability: (Probability) x (hazard) =Risk. Risk can be perceived in so many ways; as long as it combines hazard with the probability of such a hazard to occur.

Financial institutions face numerous risks that are interrelated; hence there effective management is of utmost importance, (Butterworths, 1990).

Without effective management of these risks, banks can easily become insolvent. If the bank is perceived to be in financial problems, depositors will run on their deposits, other banks won't lend funds to it. This worsens the banks financial position further. The fear of bank failure was one of the major causes of the 2007-2009 credit crisis and other panics that were observed in the banking sector worldwide.

The risks banks face are shared by many other business entities, the major risks being; liquidity, Interest rate, operational, strategic and foreign exchange risks.

Liquidity Risk: Liquidity is the ability to generate cash and cash equivalent in a timely manner at a reasonable price to meet obligations as and when they fall due. The basic expectation of the bank is to provide funds on demand. This is with respect to the following circumstances: when a client wants to withdraw money from his or her savings account, when business presents a cheque for payment, or borrowers who may want to draw on their credit lines. The other need for liquidity arises when payment of bills that are due need to be made (Cornet ,et al 2008). The major problem of liquidity management for a bank is that: whereas bills are mostly predictable, both in timing and expected amounts, customers' demands for cash are not, especially from savings deposit and current account deposits. Off-balance sheet items pause another major liquidity risk. These items include loan commitments and letters of credit. A loan commitment is a line credit that the bank provides on demand. Letters of credit include commercial letters of credit, where the bank guarantees that an importer will pay the exporter for imports and a stand by letter of credit which guarantees that issuer of commercial paper or bond will pay back the principal (Clarke ,et al 1999). Liquidity risk management is achieved by asset and liability management. Asset management entails keeping cash and keeping liquid assets that can be disposed quickly at low or no cost.

Liability management on the other hand entails management of borrowing practices. The primary purpose of using asset management to provide liquidity; is to maintain a sufficient level of both cash and liquid assets. Liquid assets can be sold quickly at what they are worth net of transaction cost or bid/ask spread. They can therefore be converted into a means of payment for little cost (Pyle, 1997). The primary liquidity solution for banks is to build reserves which the law provides for. Reserves constitutes of: all money held in cash safe vaults, cash held at Central Bank of Kenya and that held in accounts with other commercial banks. Under section 19 of the Banking Act, an institution should maintain a minimum holding of liquidity assets as the Central Bank of Kenya may deem fit from time to time. Currently the institution is required to maintain 4.5% of all deposit liabilities; matured and short term liabilities in liquid assets as CRR (Cash Reserve Ratio). Banks can also keep excess reserves in the Central Bank of Kenya accounts. (Banking Act cap. 488). Though reserves provide liquidity, they earn little or no money for the bank. Vault cash pays no interest. The same applies to deposits at Central Bank of Kenya. By buying liquid assets, a bank can earn money while maintaining liquidity at the same time. The most liquid and safest assets in Kenya are treasury bills, bonds and repos, of which banks are the major buyers. A bank can also increase liquidity by squeezing its lending practices. Many loans that are constantly renewed are mainly short term in nature. By not reviewing such loans, the bank receives the principals and interest all a long until the final installment is settled. However such practices are not undertaken by many banks because most short term borrowers are business customers, of whom by not renewing loans extended to them could prompt them take their businesses elsewhere. A bank can increase its liquidity level by borrowing from another bank or issuing securities. Banks mainly borrow from each other in an inter-bank market/money market where banks with excess reserves lend to banks with insufficient reserves. They can also borrow from Central Bank of Kenya; however this is undertaken as a last resort. Central bank of Kenya is the issuer of debt instrument known as a repurchase agreement (Repo). This is a short term non collateral loan where banks extend money to Central Bank with intent of having the transaction reversed at a specified time, along with interest payment. Most repos are fortnight loans (Gardiner et al, 2000).

Credit Risk: Credit default risk occurs when a borrower cannot repay the loan. It remains the most important risk to manage to date. The predominance of credit risk is even reflected in the composition of economic capital, which the banks are required to keep aside for protection against various risks. According to one estimate of all the risks, credit risk takes about 70% and 30% of the remaining is shared between other risks. Non performing advances are indicators of credit risk. Capital adequacy ratio is also another measure of credit risk. Capital adequacy ratio is supposed to act as a buffer against credit loss (Rekha et al, 2005). Banks are required to maintain provision for such accounts to cover up losses. However banks reduce credit risk by screening loan applicants, requiring collateral for a loan, credit analysis and diversification of their loan portfolios (Hempel,et,al 1994).

Interest Rate Risk: The banks main source of profit is derived from the conversion of liabilities of deposits and borrowing into assets of loans and securities. Banks earn profits by paying lower interest on liabilities compared to what they earn on assets. The difference in this rate is referred to as the net margin or spread. However it should be noted that, the term of bank liabilities are usually shorter than the terms of its assets. Interest rate paid on deposits and short term borrowings are sensitive to short term rates, whereas interest earned on long-term liabilities is fixed. This creates interest rate risk, which in this case is the risk that interest will rise making the banks pay more for their liabilities. Excessive interest rate risk may erode a banks earnings and capital base (Saunders, 2002).

All short term and floating rate assets and liabilities are interest rate sensitive. Interest received on assets and paid on liabilities changes with respect to the changes in the market rates. Interest rate sensitive assets include savings deposits and interest paying short term fixed deposits. For a bank to determine its overall risk to changing interest rates, it must determine how income will change when interest rates change. Gap analysis and duration analysis are the two common tools that are used for measuring the interest rate risk of bank portfolios. Gap analysis is the difference between the values of interest rate sensitive assets and the value of interest rate sensitive liabilities (the gap) multiplied by a change in interest rate. Since interest rate affects prices of bank assets and liabilities; it in the same way affects bonds, bankers also use a tool commonly used in bond portfolio analysis known as duration analysis. Duration measures the change in price of a bond when interest rate changes. Banks calculate their duration gap by subtracting the weighted average duration of their assets less the weighted average duration of their liabilities. Banks can reduce interest risk by matching the terms of their interest rate sensitive assets to liabilities, though this reduces their profits, they can also extend long term loans based on a floating rate, but many borrowers normally demand a fixed rate to lower their risk .Floating rate loans increases credit risk when rates rise because borrowers have to pay more each month on their loans hence making them unaffordable (Hull, 2007).

Foreign Exchange Risk: This risk arises when a bank suffers losses as a result of adverse exchange rate movements during a period in which it has all open position, either spot or forward or a combination of both in an individual foreign currency. The risk tends to be identified with cross border capital flows. Where a bank holds assets denominated in foreign currency whereas liabilities are held in their home currency, if the exchange rate of the foreign currency declines, then interest and principal

repayments will be worth less than when the loan was awarded, hence this reduces the banks profits. Banks can however hedge against this risk by using forward and futures contracts that will guarantee an exchange rate at some future date or provide a payment to compensate for the adverse movement in the currency exchange rates. A bank with a foreign branch or subsidiary in the country, can also take deposits in foreign currency, which will match their assets with liabilities (Thygerson, 1995).

Operational Risk: Operational risk arises from the bad business practices or when buildings, equipment and other property required to run the business are destroyed or damaged. Many types of operational risks such as property are covered by insurance. However good management is required to mitigate the banks against bad/faulty business practices, since such losses are not insurable (Pyle, 1997).

Strategic Risk Management: Strategic risk is the current and prospective impact on earnings or capital arising from adverse business decisions or lack of responsiveness to changes in the industry. The post liberalization years have seen increased pressure on banks in developing countries. The main reason behind this has been absence of effective and strategic credit risk management system. Risk selection, as part of the comprehensive strategy that supports and grows from corporate foundation is the basis for future risk management. It entails four steps: establishing corporate priorities, choosing the credit culture, determining the credit risk strategy and implementing risk controls. These strategies focus on reducing the volatility in the credit quality of the banks credit portfolio and earnings performance. Strategic credit risk management provide banks staff with a clear understanding of the banks credit culture and the risk acceptable in the loans and advances portfolio. The senior management should manage the process and the portfolio to align them with corporate priories. This risk is a function of the compatibility of an organization's strategic goals,

the business strategies developed to achieve these goals, the resources deployed against those goals and the quality of implementation. The resources needed to carry out business strategies are both tangible and intangible. They include communication channels, operating systems, delivery networks and managerial capacities. In strategic management, the organization's internal characteristics must be evaluated against the impact of economic, technological, competitive, regulatory and other environment changes (Basel, 1999). The starting point for all effective strategic risk management is to set strategic goals in form of a mission statement, In order to accomplish their mission banks have concentrated on increasing the clientele base, sensitizing all staff members on the need for customer centricity, improved the balance sheet size and improved the; spread so that the bottom line of the bank remains healthy. The Risk Managers are actively involved in the annual budget exercise and also in mid-term reviews. During such meetings, the Risk Managers comes out with a detailed SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis of the bank (Clarke et ,al 1999).

# 2.3 Credit Management

Credit management is the process for controlling and collecting payments from clients. A good credit management system reduces the amount of capital held by debtors and minimizes the banks vulnerability to bad and doubtful debts. Good credit management is essential to banks cash flows. It should be noted that, it is possible to be profitable on paper but lack the cash to continue with business operations (Edward, 1997). Credit management minimizes the chances of bad debts through adoption of good credit management practices. The following however should be adhered to, for commercial banks to come up with a comprehensive credit management program, banks should clearly state in writing the terms and conditions of credit and stipulate their credit policies. This should be in

tandem with their business. Legal advice should be sought before any final document on the credit sought is released. This is to ensure that no internal inconsistencies arise and all the key aspects on credit are covered. Any illegal terms that could be a recipe to opening court battles should be expunged. Banks should include terms on all contracts, agreements and related documents to safeguard their interests. This should clearly specify the period for which the credit has been extended to the party, and a written acceptance to the agreement along with a written approval of any variations to the original agreement.

Other terms and conditions to include are:

Penalties for late payment specifying the interest rate to be charged, under normal circumstances the current bank rates will apply, though the bank reserves a right to charge a higher rate, the bank should have a good title to the assets charged to it as security, the customer should not create any charge mortgage pledge or lien of any kind whether express or implied on them. Upon full settlement of the credit, the security charged should be discharged following laid down legal procedures and the banks credit policy. It should be clearly stated to the borrower that the credit extended is deemed to be a continuing and running account and the agreement signed shall not be discharged or terminated by reason that the said account has been brought into credit at any time or from time to time. Banks should have a right from time to time to apply all the money held by them on behalf of the client in any accounts held by the client be it that they are in credit or debit towards settlement of any amount together with interest thereon which shall be or may become due from the customer.

## 2.4 Basel Accords on Credit Management

The Basel accords are recommendations on banking issued by the Basel committee on banking. The main objective of the Basel accords is to create an international standard that banking regulators would use when

creating regulations in their own countries. These accords are about how much capital the bank should hold to cushion itself against financial and operational risks that they face. The foundation of the Basel accords I is the Cooke ratio. This ratio is defined as the amount of capital to risk weighted assets which must be at least 8%. The risk weighted assets relates to the amount lend by the bank multiplied by the risk weight. Basel I accords allows banks to use their own internal models in measuring credit, hence making it easier for banks use (Basel I, 1999). This simplicity however has opened windows to some unanticipated credit risk that are being experienced globally today, Consequently, a new more risk sensitive capital- adequacy framework was issued in 2002. Basel II accord made some improvements over the focus on the three pillars of risk minimization. These are: minimum capital requirement that is expected to determine the amount of capital requirements given the level of: credit risk, market risk and operational risks that the banks are exposed to. Pillar II is on supervisory review-It provides a framework for dealing with all other risks that the bank may face. These includes: systematic risk, concentration risk, strategic risk and reputation risk. Pillar III focuses on market discipline- designed to allow the financial community have a better picture of the overall risk position of the bank by allowing competitors to price and deal effectively (Basel II, 2002).

Although the new accord aims at boosting the safety of the banking system, It is feared by many Central banks worldwide for it may target only internationally active banks with 20% of the business from international operations and significant banks which are defined as those whose market share in total assets of domestic banking exceed 1%. However Basel II accord remains a challenge to the entire banking industry. Banks should be conceptually and academically ready to adopt the new norms. This involves a paradigm shift in the direct supervisory focus away to the implementation issue in many parts of the world. Much

of the Basel accords have been instrumental in providing some effective credit management framework thereby avoiding some credit crises. It has become apparent that, some risk measurements have to be strengthened so as to reduce high incidences of non performing loans. These risks are: risk of corporate governance, special or uncalculated risks caused by factors beyond the expectations of risk undertaking and overheads (Somoye, 2010).

# 2.5 Credit Risk Management

Risk is the fundamental element that drives financial behavior. Without risk; financial systems would be vastly simplified. However risk is present everywhere in the real world. Financial institutions therefore should manage the risk efficiently so as to survive in the highly volatile world. The future of banking undoubtedly rest on risk management dynamics. Only those banks that have efficient risk management systems will survive in the market in the long run. The effective management of credit risk is a critical component of comprehensive risk management measures essential for long-term success of banking institutions. Credit risk is the oldest and biggest risk that a bank by virtue of its very nature of business inherits. The cornerstone of credit risk management is the establishment of a framework that defines corporate priorities, loan approval process, credit risk rating systems; risk adjusted pricing systems, loan review mechanisms and comprehensive reporting system. The two distinct dimensions of credit risk management can be identified as preventive and curative measures. Preventive measures include risk assessment, risk measurement, early warning signs that will pick early signals of future defaults and better credit portfolio diversification. The curative measures on the other hand aim at minimizing the post-sanction loan losses through such steps as securitization, risk sharing and legal enforcement. It is believed that an ounce of prevention is worth a pound of cure (Rekha et al, 2005).

According to Hempel (1994), the concept of moral hazard and adverse selection provide a framework for understanding the principles that financial institutions managers must follow to minimize credit risk and make successful loans. Adverse selection is problematic in loan markets because borrowers with high credit risk are the ones who usually lineup for loans and those who will provide bad customers are likely to be selected/picked from this group. Moral hazard is a problem in loan market because borrowers may have incentives of engaging in activities that are undesirable from the lenders point of view in such situations; it is more likely that the lender will be exposed to the hazard of default. An attempt by commercial banks to solve these problems helps in explaining a number of principles for managing credit risk such as: screening, monitoring, collateral, compensating balance requirements and credit rationing among others.

Screening: Commercial banks should maintain a checklist to ensure that all the required information in line with credit applications are comprehensively collected. They should set out pre-qualification criteria for screening that should guide the credit officers in determining the type of credit that deem to be acceptable. For instance the criteria could include rejected applications in blacklisted customers all together so as to avoid duplication of effort (Reddy et-al, 2004).

Commercial banks should ensure that the credits extended to its clients are utilized in legitimate ventures in line with the application to avoid usage in fraudulent activities that go against the law of the land. They should avoid extending credit to individuals or companies of questionable integrity or repute (Mishkin, 1998). To save the bank from imminent losses, problematic facilities need to be identified early. A proper monitoring system will provide the basis for taking prompt action when warning signs

point towards the deterioration of the financial conditions of the borrower. Such include unauthorized drawings, arrears in repayment of principal and interest and deterioration in the borrower's business environment (Mishkin, 1998).

After screening, the next stage is credit appraisal where the bank assesses the following attributes: the customer's ability to repay the loan, the nature and value of the collateral or guarantee in support of the credit so as to mitigate risk, the working capital financing should not be pegged to the existence of collateral or guarantee. Such financing should be supported by a proper analysis of projected levels of sales and cost of sales, prudential working capital ratios, past experience of working capital financing and the contribution to such capital by the borrower himself. Where the bank is engaged in loan syndication, each of the participating bank should apply its own credit risk analysis based on the information at its disposal to ensure that it does not rely on the analysis undertaken by the leading underwriter (MacDonald et -al, 2006).

Commercial banks must put in place written guidelines with respect to the credit approval process, the approval authorities of individuals or committees and the basis of such decisions. They can also apply credit rationing as gap measures. Credit rationing is twofold: When the financial institution refuses to make a loan to a borrower even if he is willing to pay a higher interest rate and when the financial institution is willing to make a loan but restricts the size of the loan to less than the amount the borrower would like. All credits approved should be at arms lengths. Credit to related parties should be thoroughly scrutinized, analyzed and monitored so that no senior person in the management overrides the established rules for granting credit (Bank of Mauritius Guideline on Credit Risk Management, 2003).

Credit documentation is a pre-requisite for each phase of the credit cycle, credit application, credit approval, credit monitoring, and collateral valuation, and impairment recognition, foreclosure of impaired loans and realization of security. Credit files must be properly maintained with an appropriate system of indexing to facilitate quick review and follow up as and when need arises. Documentation establishes a relationship between the bank and the borrower and it forms a base for any legal action in the courts of law. All contractual agreements with the borrowers should be vetted by the banks legal adviser .Credit applications whether approved or rejected must be properly kept. Copies of critical documents should be kept in credit files while retaining the originals in files kept in secure fire proof cabinets and should never be removed from the banks premises (Edwards, 1997).

Commercial banks must ensure that their credit portfolios are properly managed. Loan agreements are dully prepared, renewal notices are served on time and credit files are updated on a regular basis. Once the credit has been approved, the applicant should be advised of the terms and conditions of the credit through the letter of offer, the duplicate of this letter should be signed and returned to the bank by the customer as an indication of acceptance. Upon receipt of this letter the facility disbursement process should commence. Regarding documentation, the registration of collateral, insurance cover with the banks interest should be properly vetted by the banks legal expert. Under no circumstances should funds be disbursed prior to compliance with the pre-disbursement conditions and approval by relevant authorities of the bank (Sinkey,1992).

# 2.6 Requirements for Credit Risk Management

Non performing loans are the most common causes of bank failures. This has prompted all regulatory institutions to prescribe minimum standards for credit management. Identification of existing and potential risk is

prerequisite in successful lending activities. This starts with the identification of potential risks through carefully study of the source of problems or the problem itself. Upon this identification, risk sources are ascertained and analyzed. Risk sources may be may be external or internal to the system that is the target of risk management, Examples of risk sources include: shareholders of a project, employees of a company or the weather. In the process of analyzing risk sources, problems are identified and subsequently analyzed. In problem analysis, risks are related to identified threats. For example, the threat of loosing money as a result of customer defaults in effecting payments. These threats may exist with various entities such as shareholders, customers and the government. Once risks have been identified, risk assessment must be carried out to ascertain the potential severity of the loss and the probability of occurrence. In the assessment process, it is critical to make the best educated guesses possible in order to properly prioritize implementation of the risk management plan with a view of mitigating the losses. This is through adopting control or counter control measures to measure each risk. Risk mitigation measures need to be approved by the appropriate level of management. For example, a risk concerning high level lending should have the top management decision behind it, usually the board of the bank. A credit risk management plan should propose applicable and effective security controls for managing risks. A good credit risk management plan should contain a schedule for control implementation and responsible persons for those actions. Implementation in credit risk management involves: following all the planned methods for mitigating the effects of the risks. These include: purchase of insurance policies for risks that have been decided to be transferred to an insurer, avoiding all risks that can be avoided without sacrificing (Sinkey, 1992).

Measures to counter credit risk normally comprise clearly defined policies that articulate the banks credit management policies and the parameters within which credit risk is controlled clearly. Specific credit risk management measures included four kinds of policies. One set of policies include those aimed at avoiding the risk by not performing an activity that could carry risk. An example could be lending to a particular sector in the economy. Avoidance would seem to be the best solution to all risks, but avoiding the risk by not performing a certain activity means loosing out on potential gains that accepting risk might have allowed. The second set includes the policies of asset classification which exposes the bank to credit risk. These sets of policies are geared towards reducing the severity of the loss from occurring. The third sets of policies include risk retention. This relates to accepting loss when it occurs. This is a viable strategy for small risks where the cost of insuring the risk outweighs the resultant benefits. The forth set of policies include risk transfer. This means causing another party to accept the risk typically by contract or by lending, insurance is typically one type of risk transferred (Dorfman, 1997).

# 2.7 Credit Evaluation

Credit evaluation is the process a business or an individual must go through to become eligible for a loan. Granting a loan depends on; the willingness of the bank to lend in the current economy based on its assessment of the ability of the borrower to repay. According to MacDonald, et al (2006) credit evaluation begins with the analysis of the organization and the business structure of the borrower. It should be ascertained whether the borrower is: a holding company or a single entity, whether he or she operates as a partnership or a corporation, when the firm began operations and the geographical market it competes. The evaluation should identify the products or services the borrower deals in and the firm's competitive position in the market as measured by market share, the threat of new entrants, the threats from substitute products, the bargaining power of customer and, the bargaining power of suppliers (Chartered Institute of Bankers, 1997). The analyst should examine the

historical sales growth and its relationship with the industry sales, business cycle and the projected forecast for the industry. The analyst should address questions related to: the availability of suppliers for raw materials, the quality of the firm's labor force and employee relations, and; whether the firms fixed assets are standard or obsolete (Gerschick ,2002).

The bank should focus on the management character and quality. The background of the chief executive officer, the finance manager and operating officers should be ascertained in terms of: individual ages, experience in business service with the organization and the apparent succession plan. Top officers in the firm with equity interest and the type of compensation they receive should be identified too. This helps in the identification of the motivating factors underlying the firm's decision. At the end, the analyst should recognize the borrower's loan request, the quality of financial data provided, and the proposed use of the funds, amount of funds requested plus the anticipated source of repayment both primary and secondary. It should also specify whether the financial statements were audited and the type of opinion given by auditors (Thygerson, 1995).

#### 2.8 Credit Control Policies

The objectives of the credit policy are: to optimize the credit and returns envisaged in order that the economic value addition to shareholders is maximized and the interest of all the stakeholders are protected alongside ensuring; corporate growth and prosperity with safety of the banks resources, to regulate and streamline the financial resources of the bank in an orderly manner so as to enable the various channels achieve common goals and objectives, to instill a sense of credit culture enterprise-wide and to assist the operating staff, to strengthen the credit management skills namely, pre-sanction, post-sanction monitoring, supervision and follow up measures and maintain quality credit portfolio

in the bank, to deal with credit proposals more effectively with quality assessment speed and in full compliance with guidelines and to comply with various regulatory requirements, more particularly on exposure norms, prudential guidelines, capital adequacy and credit risk guidelines of the Central Bank of Kenya. The banks credit policy should be in tandem with its overall strategy. In a nutshell the factors considered in establishing a credit control policy include: borrowings available that is, scope of allowing credit, what the competitors are doing, the business conditions and prospects, customer mix and possible volumes, market strength whether the bank is the leader or follower and the cost of bad debts verses the net margin it anticipates to maintain (Edwards, 1997).

#### 2.9 Policies to Reduce Credit Risk

Bank regulators have paid a lot of attention to risk concentration by commercial banks in the past. The regulators objective in credit management is to prevent commercial banks from relying heavily on a large borrower or groups of borrowers but not to dictate to them to whom they should lend funds to. The prudential guidelines usually stipulate that banks should not make investments or extend credit facilities to any individual entities in excess of an amount that a prescribed percentage of the banks capital and reserves provides. Most countries impose a single customer exposure limit of between 10-25% of capital (Gruening ,et al 1999).

Lending to a single sector of the economy or to a narrow geographical region represents another dimension of risk concentration. This increases the banks vulnerability in the weakness in the certain sector of the economy or region and increases the risk of failure of clients in that sector or geographical region for one reason or the other. It is often difficult to assess the exposure of banks to various sectors of the economy, as quite a number of them do not report such information (Hempel, et al 1994).

Lending to related parties is another form of credit risk exposure banks are subjected to. These parties include; major shareholders, subsidiaries, parent bank, affiliate companies, directors and chief executives officers. This relationship compromises the ability of the management to exert control or influence the banks policies and decision making on matters appertaining to credit. These calls for a limit to be established for credit extended to related parties. Any aspect of loan renegotiation or restructuring should be approved by the board of directors of the bank. Loan renegotiation refers to either the reduction of either interest or principal owing to the deterioration of the financial conditions of the borrower. Restructuring may involve a transfer from the borrower to the bank of real estate, receivables or any other asset from the third parties to satisfy the loan or addition of a new debtor to the original borrower. The bank should put in place policies to ensure that such items are properly captured from the accounting and control standpoint (Sinkey, 1992).

# 2.10 Expected Probability of Default

Credit risk being the uncertainty associated with the borrower's loan repayment. It is assumed that if the probability of default is d, then the probability of receiving the payment is (1-d). Taking into consideration the cost the bank incurs in the loan processing in terms of salaries for their officers, processing costs and other non interest expenses, a profitable loan contract say r\* must compensate the bank /lender for the time value of money as reflected by the risk free rate of interest r, and the default.

$$r^* = \underline{1+r}$$

1-d

The banks profitable loan contract rate increases with its perception of the borrowers probability of default (risk). The difference between the profitable

loan contract rate (r\*) and the risk free rate (r) is the default risk premium required by the lender. Rearranging the equation,

Default risk premium=r\*-r=(1+r)d.

Theoretically the typical credit analysis performed by a bank focuses on determining a borrowers probability of loan repayment, (1-d), where d is the probability of default (Sinkey, 1992).

# 2.11 Taking Risk as Competitive Edge by Banks

Risk averse banks intentionally expose themselves to risk and increase exposure over time because they believe they can exploit risk to the advantage and generate value. It is true that risk exposes banks to potential losses but risk also provides them with a wide range of opportunities. A simple vision of successful risk taking is that, we should expand our exposure to upside risk while minimizing the potential for downside risk. A bank that is more focused on which risk to take, which one to avoid and which one to pass to its investors may be able to determine which of the existing investments it should keep but at the same time generate higher returns. A risk averse bank that is excessively cautious when investing will have fewer investment avenues and report lower returns from its investments Risk is collorary to competitiveness (The higher the risk the higher the returns) and hence the ability of the bank to maintain a competitive edge amongst its members in the industry. However it should be noted that the level of risk increases when the banks looses creep in containing the market needs and when they employ obsolete technology and personnel skills in there operation It is on this backdrop that for money to be properly managed there is high need for skilled personnel, openness and adequate tools. Risk management has similar attributes but not many banks are convinced that risk control policies can limit undue exposure and give the bank a competitive edge (Mutwiri, 2003).

# 2.12 Non-Performing Advances

In the banking literature, the problem of non performing advances has been revisited in several empirical studies. According to Y. Hiou (2004) in his paper entitled The Non-Performing Loans: some Bank-level Evidences, he argued that non performing loans are one of the major causes of economic stagnation. Each non performing loan in the financial sector is viewed as an exact mirror image of an ailing unprofitable enterprise. Hence eradication of non performing loans is vital for any economic improvement to be realized. During a crisis period, in order to restore credibility amongst creditors and depositors failing financial institutions not only try to expand their equity bases, but also reduce their risky assets or change the composition of their asset portfolio. As a result of such action of defense, corporate debtors are targeted, thus stalling the overall economic growth. The cutback in loans impairs the corporate sector as they have difficulties in expanding their working capital, blocking their chances of resuming normal operation. This unavailability of credit to finance the firms' working capital and investment might trigger the second round of business failure which in turn exacerbates the quality of bank loans, resulting in a re-emergence of banking failure. In a worse case, it triggers an endless vicious liquidity spiral: As a result of poor economic condition and depressed economic growth, the level of non performing advances increases → the weaker corporate sector makes banks more reluctant to provide additional credits → with insufficient capital, the production sector is further weakened, resulting in decreases in aggregate demand which worsens the borrowers conditions hence creating more non performing advances. The most important reason for default could be attributed to the mismatch between the borrower's terms of credit and the creditor's/banks terms of credit. The terms of credit can be as follows: assuming that the borrower makes an internal assessment of his economic activity on which he requires external financing. An optimal configuration for the borrower

could involve taking into consideration the following parameters in the contract C(A,r,m,n,s). Where (A) is the amount of finance sought, (r) is the interest rate (m) is the maturity period of the loan, (n) is the number of installments and (s) is collateral for his profitable economic venture. Based on competing portfolio consideration, the creditor/bank could carve out its contract  $C(A_1,r_1,m_1,n_1,s_1)$ . It is not possible for a borrower to get the bank that agrees to his terms of credit. Hence he is constrained to agree to the terms stipulated by the bank to access finances. Once this financial constraints have been overcome, the borrowers starts looking into ways of making changes to turn the contract so as to favour him. This involves the decision to default. This decision comes with costs and benefits. The benefits to default can subsequently lead the loan to becoming a non performing advance. This accrues from each of the parameters in the loan contract. Considering the parameter of loan maturity (m). A default entails lengthening the loan maturity period. The defaulter could reduce the real loan burden since the present value of the credit would decrease with increase in the loan maturity. If the borrower anticipates that the rate of interest(r) are bound to rise, a default option would benefit him enjoy the existing facility at a relatively lower interest rate. This provides the borrower an opportunity to the use installment payment (n) in other more profitable ventures. The amount of credit (A) could play a critical role in influencing the borrower's decision to default on bank loans. Large amount of loan would involve high present value of the loan burden. The amount of loan will have significant effect on legal cost and may not induce a default under certain circumstances. For a genuine bank borrower default may not be the best option since it is coupled with reputation cost which in turn could affect his recourse to refinancing or accessing fresh financing activities in future (Ranjan et al ,2003).

The amount of credit relative to measure of economic activity and the level of funds of banks rather than credit itself could be important for borrowers (Mohan,2004). From the cost side, the borrower faces three major costs: reputation cost, legal and bankruptcy cost, plus penalty charged by banks after the disposal of the court case. In view of the above, it is apparent that before choosing the option to default, a rational borrower has to make an assessment of all the costs and benefits that will accrue from his action (Reddy, 2004).

According to Muniappan (2002) the problem of non performing advances is related to the external and internal problems confronting the borrowers. The internal factors relate to the diversion of funds from what they were initially destined to other causes such as expansion/diversification/modernization, taking up new projects, time overruns during project implementation stage ,business (product, marketing) failure, inefficient management, strained labor relations, inappropriate technology/technical problems, product obsolescence. Whereas external factors include recession, non payment in other countries, inputs or power shortages, price escalations, accidents and natural calamities.

Sergio (1996) in his study of non performing loans in Italy found evidence that, an increase in the riskness of loan assets is rooted in a banks lending policy adducing to relatively unselective and inadequate assessment of sectoral prospects. This study refuted that business cycle could be a primary reason for the banks non performing advances but emphasized that increases in bad debts as a consequence of recession alone is not empirically demonstrated. It was viewed that the bank-borrower relationship will thus prove effective not so much because it overcomes informational asymmetry but because it recoups certain rules of credit appraisal.

Bloem and Gorter (2001) suggested that more or less predictable level of non performing advances, though may vary from year to year slightly, are caused by inevitable number of wrong economic decisions by individuals or plainly bad luck. Under such circumstances the holder of the loan can make an allowance for a normal share of non performance in the form of bad loan provisions or spread the risk by taking an insurance cover. Banks may be able to pass a large portion of these costs to borrowers in form of higher interest rates charged on loans that will include a margin premium of risk of non performance of granted loans.

McGoven (1993) in a study on loan losses in the United States of American banks, argued that character has historically been a paramount factor of credit and a major decision in lending. Banks have suffered loan losses through relaxed lending standards, unguaranteed credits. He suggested that banks should carry out a fair character assessment to ascertain the personality morale profile of prospective and current borrowers and guarantors. Apart from considering personal interaction, the bank should; try to draw some conclusions about the borrowers staff morale and loyalty, study the prospective borrowers credit report, carry out trade-credit reference checking, check references from the present and previous bankers, determine how the borrower handles stress. Over and above this the bank can minimize risks by securing the borrowers guarantee, using government guaranteed loan programs, and requiring conservative loan to value ratio.

Mohan (2003) in his presentation on Transforming Indian Banking: In search of a Better Tomorrow observed that lending rates had not come down in India as much as deposit rates and interest rates on government bonds. Whereas banks had reduced their prime lending rates and were extending sub-prime lending rate loans, effective lending rates remained high. This kind of development had adverse systematic implication to a country like India where interest cost as a proportion of sales cost are higher compared to other emerging economies. This kind of scenario is

replicated in Kenya where banks continue charging high interest rates on loans despite a drastic reduction in the base lending rates by Central Bank of Kenya. This increases the vulnerability of loan defaults.

Fuentes and Maquieria (1998) undertook an in depth analysis of loan losses due to composition of lending by type of contract, volume lending, cost of credit and default rates in Chile. They examined various variables that may affect loan repayment these included: limitations on to access credit, macro economic stability, collection technology, bankruptcy code, information sharing, the judicial system, pre-screening techniques and major changes in financial market regulations. The findings of the study were that a satisfactory performance of the Chilean credit market in terms of loan repayment is underlined in good information sharing system, an advanced macro economic performance and major changes in the financial market regulations. From this finding it can be realized that Central Bank of Kenya has borrowed a leaf of this through the introduction of the credit information sharing system and revamping the financial market regulations.

Kent, et al (2000) in their study on The Relationship between Cyclical lending Behaviors of Banks in Australia found that the potential for banks to experience substantial losses on their loan portfolio increases towards the peak of the expansionary phase of the cycle. Towards the top of the cycle, banks appear to be relatively healthy-non performing loans are low and profits are high indicating that even the richest tend to benefit from the booming economic conditions.

# 2.13 Loans and Advances Classification

Loans and advances classification is a key risk management tool in the banking industry. This is the process whereby advances are assigned a credit risk grade determined by the likelihood that the debt obligation will be serviced in full or liquidated within the stipulated period in the contract. Banks determine asset classification themselves but follow standards that are normally issued by regulatory authorities (Gardiner, et al 2000).

Central Bank of Kenya Prudential Guidelines (2008) and Gruening et al (1999) observe that loans and advances classification recognize the following classes: normal, standard or pass, specially mentioned or watch, substandard, doubtful and loss. Normal, standard or pass class relates to the loans or advance facilities that are well documented and extended to financially sound customers, where no weaknesses have been exhibited. The debt service capacity is considered to be beyond any reasonable doubt or fully secured by cash or cash equivalent (Kabiru, 2000). Specially mentioned or watch class are loans and advances that are good accounts that would be classified under normal only that they exhibit certain weaknesses that warrant management attention. Examples are; loans and advances granted without proper documentation or the bank lacks control over the collateral, loans granted to individuals and companies operating under adverse economic or market conditions and loans and advances granted to borrowers with adverse trends in their operation trends (Dhanuskodi, 2006). Substandard class of loans and advances are facilities which though still operative, involve some degree of risk and they also exhibit possibility of future loss unless close supervision is given and corrective measures are taken to strengthen the position of the institution. The debt service capacity and the primary sources of repayment are insufficient and the bank is compelled to look at the

secondary sources of repayment such as collateral, the sale of fixed assets or refinancing. The category includes non performing advances whose principle and interest repayment are 90 day overdue. Doubtful advances are advances where major weaknesses exist that indicate that full recovery of the amount outstanding will be extended beyond the advances/loan contract or is doubtful and that loss as yet uncertain is eminent. Non performing advances that are at least 180 days past due are also classified as doubtful unless they are well secured. Loss category constitutes all those loans and advances with outstanding arrears which are regarded as being uncollectible and those whose securities are worthless or has been disposed off, the proceeds of which have not covered the loan balance and the remaining balance is unlikely to be recovered. This classification does not imply that the advance has no absolutely salvage value but writing it off is necessary. All non performing advances that are one year past due fall in this category, unless they are well secured (Dhanuskodi, 2006).

# 2.14 Loan Loss Provisioning Policy

Advances and loans classification provides a basis for determining an adequate level of provisions for possible loan losses. The policy regarding provisioning varies from country to country and is at the mandate of the regulators. In those countries with fragile economies, regulators have established mandatory levels of provisions in relation to the asset classification (Basel Committee, 1999).

# 2.15 Causes of Non-performing Loans

According to Islam, et al (2005) default culture is not a new dimension in the arena of investment. Rather in the present economic culture, it is an established culture. The redundancy of unusual happenings becomes so frequent that it seems that people prefer to be declared as defaulters. The reasons for these defaults have a multidimensional aspects ranging from external, customer specific and bank specific factors.

External factors mainly relate to the economic downturn. The economic downturn has eroded the purchasing power of the consumers leading to the proliferation of bad loans. The high level of poverty has highly affected 3 Cs in the credit appraisal model namely: capacity to pay the loan the value of collaterals and the condition of the economy (Mutwiri, 2003).

Customer specific factors mainly relate to the customer failure to disclose vital information during the loan application process or the borrower blatantly refuses to pay on time or skillfully avoid payment through taking advantage of the weak legal system to restrain the bank from realizing the security (Hempel ,et al ,1994). In this case the bank is not able to asses the character of the borrower well.

Bank specific factors are where numerous causes of non performing advances lie. These range from: Loans sanctioned by corruption, reduced attention by the borrowers and moral hazard (Waweru, et al 2009). Sometimes loan sanctioning authority sanctions loans for satisfying their self interested behavior. Thus they engage themselves with clients and corrupt the total system by giving some benefit for taking something in return. This results from too much politicization and power-relatedness in the institutional system, (Islam, et al, 2005). There are instances in the past when it was easier to get a loan from a financial institution as long as the borrower had security to be charged to it than the ability to repay (Mutwiri, 2003). Other aspects of the customer such as character were not given sufficient attention. Reduced attention to the borrowers to the fact that the bank is paying attention to them through regular inspections by bank officials on their activities get better results than perception of inattention, of being ignored (Dhanuskodi, 2006). The adverse incentives on bank owners to adopt imprudent lending strategies, in particular insider lending and lending at a high interest rates to borrowers in the

most risky segment of the credit market has precipitated the problem of non performing advances too. Most of the larger local banks such as the Continental Bank, Trade Bank and Pan African Bank involved extensive insider lending, often to politicians (Waweru, et al, 2007).

# 2.16 Measures of Non Performing Advances

The ratio of total non performing loans to total loans that the bank has disbursed commonly known as the Asset Quality ratio is the best indicator of non performing loans.

Asset Quality= Total non-performing loans

Total loans

The lower this ratio the better the asset quality (Thygerson, 1995).

## 2.17 The 7Cs Credit Appraisal Model

There are 7 Cs used in the credit appraisal model to enable banks achieve the know your customer norms (KYC). This goes down in reducing the level of default risk banks are subjected to in the credit management process. The 7Cs are: character, capacity, collateral, contribution, conditions, control and common sense (MacDonald et al, 2006).

Character: This is the general impression made on the potential borrower based primarily on past experience on the current lender or other lenders. A good deal of such information comes from credit bureaus. Issues in line with the character of the borrowers have attracted great attention to banks. It is on this basis that the Central Bank Of Kenya licensed Credit Reference Bureau Africa as the first credit bureau in the country. The basic function of the credit bureau is to enable banks share information about borrowers for business decision making. The bureau also keeps a credit history record of the borrowers that can be used in credit scoring purposes based on the available credit history. Honesty and goodwill of the client are the most paramount factors in a successful loan. Dishonest

borrowers do not feel committed to repay the loan though they are very determined to get the loan using any means at their disposal including misrepresentation. Loan officers have to spread their time over many loan relationships; they may not leave time to uncover the elaborate schemes of such individuals who are out to defraud the bank (McGoven, 1993).

The bank has a duty of protecting its interests and hence it must protect itself from dishonest, incompetent or overly subjective borrowers through investigating their credit background. Other sources of information that can be used in assessing the borrowers' character are: records held by suppliers and past banking relationship with the customers. Where the client promptly services principal and interest, it is likely that the future loan balance will be adequately repaid. Where the client has been late in servicing past debts, the reason should be sought. Where previous creditors have experienced losses, the loan officer should almost out rightly reject the application (Hempel, et- al ,1994).

Capacity: This is measured using information related to income/stability in relation to loan repayments. The bank will always be interested in knowing exactly how the customer intends to repay the loan. Under this circumstance the banks analysts accounting, legal and finance skills are crucial in determining the ability of the borrower to repay the loan from the cash flows generated by the business. For a seasonal working capital loans, cash flows are generated by means of orderly liquidation of built up of inventories and receivables. For term loans, cash flows are generated from earnings and non cash expenses such as depreciation and depletion charged against earnings. The analyst must determine the timing and sufficiency of the cash flows and evaluate the risk of the cash flows falling short. Any other source of repayment other than cash flows from the operations should be viewed with a lot of suspicion or caution. The borrower may plan on a future injection of investor capital to repay the

loan, but where the firm fails to produce attractive profits, outsiders would definitely withhold future investment in the firm. Where the borrower may be planning to borrow funds from another bank to repay the loan, unless a formal commitment exists from that bank, the source suffers the same limitation as that of planned equity injection. The future sale of a fixed asset is not a reliable source of loan repayment. If the borrower is unwilling or unable to sell the asset at the time of the loan, a future possibility of forced sale of the asset to repay the loan is highly speculative (MacDonald et al, 2006).

Collateral: These are additional forms of security or guarantee that are provided by the borrower to the bank. They represent those assets the borrower has pledged to the bank that can be sold if he defaults and collection efforts have become futile. Though cash flows from the business operation are deemed to be the main source of loan repayment, where sufficient cash flows fail to materialize, the bank can mitigate loss if it has secured a secondary source of repayment (collateral). Giving a lender collateral means that you pledge an asset you own, such as your home, to the lender with an agreement that it will be the main repayment source in case you cannot repay the loan. A guarantee on the other hand is just that; someone else signs a guarantee document promising to repay the loan if the borrower fails cannot. However, collections from guarantors often require expensive litigation and results in bad blood between the bank, borrower and guarantor. It should be noted that strong collateral should not generally overcome deficiencies in either character or capacity. Banks avoid foreclosing on collateral because foreclosure entails much time and expense. Collateral value should cover the loan amount and the interest due, legal costs of foreclosure and interest during foreclosure proceedings (Yeager et, al 1989).

Contribution: According to Matter (1972), some customers expect their banker to provide a substantial part of the capital required in a business. Though the customer may be endowed with the skills, drive, knowledge and an original idea, but with little cash. The customer approaches the bank instead of colleagues or the market for the capital .Prospective lenders/bankers expect the business before asking them to commit any funding, the more of your own money you invest as a down payment or capital the more likely that you will do all you can to maintain your payment obligation. It is not definitely the function of a modern bank to find the capital or invest in the clients business and usually the major stake should be that of long-term lenders. An excessive stake in business implies that the bank is accepting undue risk at the rates too fine to repay such a high risk. The liquidity position of any potential borrower demands that close assessment and the greater the bank debt, actual or prospective, in relation to the capital resources of the business the weaker inherently must be the financial position of the borrower who employs a portion of the short term funds to buy fixed assets. As a general rule, a banker will rarely lend more than the amount of the proprietor's capital, but there are exceptions to this tendency. For instance brokers dealing with marketable produce in good demand may borrow several times more than their own capital on occasion from banks against the security of the produce, with or without security/collateral support, however, this should be treated as distinct exceptions to a general rule. Lack of capital in business may be overcome from the banking stand point by the deposit of adequate personal security by the proprietors. Instead of investing directly in their business, they support the bank with their own private assets (Abedi, 2000).

Conditions: Some thoughts must be given to the nature and prospects of the business of the borrower with particular reference to the prevailing economic conditions. The natural optimism of every potential borrower has to be discounted and the real prospects of the venture addressed in light of known conditions; allied to this enquiry is the desirability of the advance. Here the field is limited to the possibility of success or otherwise of the venture for which finance is sought from the bank. With the experience or otherwise of the borrower, is the project likely to succeed? If it fails ,the bank is likely to fall back on its security to recover its advances and the lending will fundamentally be misound. If it succeeds, will the development problems be overcome? Would anyone contendly lend to a factor to market ice cream to Eskimos or woolen vests to equatorial natives (Matter, 1972). Between the extremes there is much to be considered by the banker in any proposal for accommodation required by a customer. It should be noted that there are no tram lines demanding a prescribed course. It is only a question of considering the business and its prospects in conjunction with all other factors and as it were a vote for or against the proposal (MacDonald et al, 2006).

Control: While financial analysis of the loan applicant is important in capacity analysis other factors also come in play. These include: the quality of management and the operating effectiveness of the information systems used by the borrowers in managing (Thygerson, 1995). The management experience in the field and understanding of the business are key factors considered in evaluation/appraisal of the credit. One of the reasons why banks specialize in lending to certain industries is that they have developed the necessary expertise to evaluate the quality of management in those industries. A key question in lending is "How will the borrower repay"? In commercial lending, the loan applicant's business plan is a big part of the answer to this question. The business plan covers both the use of the loan proceeds and the plans for repayment. This also provides evidence of how well management understands and is able to control the business activities (Chowdhury, 2002).

Not all borrowers have good internal financial and operating systems. This can lead to unexpected problems with meeting cash flow requirements. The lender and the investor must be assured that the firms accounting system is effective, that the firm meets all the regulatory and other legal requirements and that its management information systems are adequate to manage effectively. Control aims at serving the dual purpose of increasing sales revenue by extending credit to customers who are deemed a good credit risk and minimizing risk of loss from bad debts by restricting or denying credit to customers who are not a good credit risk. Effectiveness of credit control lies in procedure employed by judging prospectus creditworthiness, rather than in procedures used in extracting owned money (Yeager, et al ,1989).

Common sense: Common sense is the natural ability to make good judgment and behave in a practical and sensible way. This calls for prudence and reasonableness in analysis, presentation and using data and all other data in relation to the business and processing them into useful information. Common sense can also be perceived as the reasonableness of the financial information provided to support the case for financing a project as an indication of the ability of the project to generate sufficient cash flows to pay for itself (Mutwiri, 2003).

The above factors should be considered jointly when any loan appraisal process is being undertaken. A good report on each of these factors reduces the risk of defaults in loan repayment. The use of the 7Cs model in credit appraisal enables banks to monitor their level of exposure with respect to existing and potential customers hence reducing the number of non-performing advances.

# 2.18 The 7Cs Credit Appraisal Model and Non Performing Advances

Non performing advances negatively impact on the liquidity position of the banks and to an extreme pushes them to closure. Most bank closures in Kenya ensued from the problem of high incidences of non performing advances. To restore confidence in the banking sector, Central Bank of Kenya through the Prudential Guidelines for institutions licensed under the Banking Act provides tough remedial and administrative sanctions to banks that can not conform to specific loan and advances requirement. The major requirement being that all the loans be properly appraised through the use of the 7Cs credit appraisal model. Hence those banks that do not use the 7Cs credit appraisal model and are victims of closure owing to the increasing levels of non performing loans are compelled to use this model. It can be realized from the banks annual financial results that, their asset quality ratio has since taken a downward trend on overall. Central Bank of Kenya (2009),(2008),(2007),(2006),(2005),(2004),(2003) Annual Banks Supervision Reports.

#### 2.19 Conclusion

Both theoretical and empirical studies reviewed above on the subject of credit appraisal, evaluation and assessments have shown the impact/effect of credit appraisal on non performing advances. This study seeks to contextualize these factors in the Kenyan banking sector as per the three objectives in 1.4.

#### CHAPTER THREE

#### RESEARCH DESIGN METHODOLOGY

#### 3.1 Introduction

The chapter brings out the data research methodology that will be used in the study taking into consideration the following aspects: research design, the population, the method of data collection and how the data collected will be analyzed.

#### 3.2 Research Design

The research design is a survey on effect of the use of the 7Cs credit appraisal model and whether a relationship exists between the usage of this model and the level of non performing advances amongst the Kenyan commercial banks.

# 3.3 Population

The registered and operational banks in Kenya that are registered under the Company Act cap 486 as limited companies and under the Banking Act cap 488 as banks. As at October 2010, there are 43 banks with branches in major and small towns countrywide. The study covered the entire 43 commercial banks in Kenya. Hence sampling was not required.

## 3.4 Data Collection

Primary data was collected using a semi-structured questionnaire administered to bank managers. The questionnaire was reviewed for completeness of responses and clarification was sought in areas that were not clear.

Secondary data on non performing loans was obtained from Central Bank of Kenya Annual Supervisory Reports for the period spanning 2003 to 2009.

# 3.6 Data Analysis

The data collected was analyzed by ratios, inferential and quantitative statistics. SPSS version 17.0 was used in data analysis that was enhanced through the use of factor analysis.

The guideline used in the assessment was as indicated below.

**Table 1: Correlation Matrix** 

	Asset	Character	Capacity	Condition	Collateral	Contribution	Control	Common	Significance 1
	quality ratio							sense	tail test
Asset quality									
ratio									
Character									
Capacity									
Condition									
Collateral									
Contribution									
Control									
Common									
sense									

The indicator of the level of non performing loans in this study was the asset quality ratio.

Asset Quality Ratio=Total non performing loans

Total loans

The lower this ratio the higher the quality of the advances and the lower the level of non performing advances.

The suitability of the use of factor analysis was underlined in the interdependency and pattern delineation of the data that was collected and its ability to relate data in a meaningful fashion was a prime aspect of induction that made it useful and efficient.

Factor analysis was used to come up with a relationship among dependent variables with the objective of discovering something about the nature of independent variables even though; the dependent variable could not be measured directly. In the study, the dependent variable was the level of non performing loans. It should be noted that, answers obtained by factor analysis were necessarily hypothetical and tentative than true when independent variables were to be observed directly.

A typical factor analysis suggests answers to four major questions that the study was to address. These are:

- (i) How many different factors are needed to explain the pattern of relationship among variables?
- (ii) What is the nature of those factors?
- (iii) How well does the hypothesized factor explain the observed data?
- (iv) How much purely random or unique variance does each of the observed variance include?

The likert scale was used in item analysis. The first step being the collection of a number of statements that met the following two criteria: each statement was relevant to the attitude being studied and was believed to reflect a favorable or unfavorable position on that attitude. The respondents were asked to respond to each statement by choosing one of five agreement choices. The number indicated the value to be assigned to each response with 1 indicating the least favorable/considered/used and 5 the most favourable/considerd/used. The responses were summed up to secure the total score. The step that followed was: arraying the total scores and selecting some part of the highest and lowest total scores. These two extreme groups represented the most favorable/considered/used towards the topic being studied (Cooper, et al 1995).

#### CHAPTER FOUR

#### DATA ANALYSIS AND FINDINGS

#### 4.1 Introduction

This research was carried out with a view of getting responses to the same question across the banking industry in Kenya. According to (Cooper, et al 1995) cross sectional survey is the most suitable method to be used in such studies. The population under study was the 43 commercial banks registered and incorporated in Kenya. Out of the 43 questionnaires sent to the field, a total of 27 were received back representing 62.79% of the response rate. The respondents were credit officers and managers.

SPSS version 17.00 was used in capturing the data, building it and subsequently in its analysis. From descriptive statistics, frequency tables, means, standard deviations and percentages were used widely to arrive at conclusions on the findings. Factor analysis was used to ascertain the degree of relationship between non performing advances and the risk assessment factors/elements (the 7Cs). The data obtained has been grouped into ten sections each describing specific findings that are presented in a tabular form or in descriptive texts.

#### 4.2 Bank Data

Respondents were asked to state the year in which their banks established operations in Kenya 48.6% of the respondents indicated that their banks started operations between 1981 and 1990.11.10% indicated that they established their operations between 1991 and 2000. It can be deduced from this finding that: the banking culture in Kenya is not old enough. This may explain the level of indiscipline in credit matters that have been observed in the past.

Table 2: Age of the Banks

Year	Frequency	%	Cum %
Before 1950s	3	11.00	11.00
1951-1960	4	14.80	25.90
1961-1970	1	3.70	29.60
1971-1980	1	3.70	33.30
1981-1990	13	48.10	81.50
1991-2000	3	11.10	92.60
2001-2010	2	7.40	100.00

On the question regarding bank ownership in Kenya, the findings were that, 70.30% of the banks in Kenya are owned by individuals. However, some respondents did not respond to this question. It can be clearly concluded that such respondents must have been drawn from privately owned banks. This is because public and government owned banks have no problems with disclosing their ownership status. Further more it should be noted that privately owned banks have had a liberal credit policy that has made them approach credit risk evaluation, assessment and appraisal casually. These findings may explain the poor credit discipline that has been observed in privately owned banks.

Table 3: Ownership of the Banks

Ownership	Frequency	%	Cum %
Government	4	14.80	14.80
Public	3	11.10	25.90
Individual	19	70.30	96.20
Any other	1	3.80	100.00

Source: Research Data 2010.

On the products and services rendered by banks, majority of the respondents reported that they offered a wide range of products including all that they were asked. These included: deposit schemes, local purchase order financing, advances, overdrafts, safe vault and asset financing among many others.

Table 4: Services/Products rendered by Banks

Products/service	Deposit	Personal	Funds	Small &	Others
	schemes	loans	transfer	Micro	
				enterprises.	
				Financing	
N	27	27	27	27	12

Source: Field Research Data 2010.

## 4.3 Credit Policy

Asked to state the factors considered when coming up with a credit policy used in credit evaluation, assessment and appraisal, using the 5 scale likert continuum scale, the findings were as follows; commercial banks normally consider the current credit policy when formulating the credit policy that had a mean of 4.30 and standard deviation of 0.993 that was the highest followed by, prevailing economic conditions that had a mean of 4.07 with a standard deviation of 1.107, followed by market strength that had a mean of 3.63 and a standard deviation of 0.967, followed by competitors activities that had a mean of 3.33 and a standard deviation of 0.920 and funds available for lending that had a mean of 3.28 and standard deviation of 1.370.

Table 5: Factors considered in setting credit policy

Factor	N	Minimum	Maximum	Mean	Standard
					deviation
Economic	27	1	5	4.07	1.107
conditions					
Competitors	27	1	5	3.33	0.920
activities					
Current	27	1	5	4.30	0.993
credit policy					
Market	27	1	5	3.63	0.967
strength of					
the ban					
Funds	27	1	5	3.28	1.370
available for					
lending					

Source: Research Data 2010

# 4.4 Credit Policy Objectives and Credit Manual

Respondents were asked to state whether their banks have credit manuals. The finding was that 100% of the respondents reported that they had credit manuals that they utilized in credit risk evaluation, appraisal and assessment. It was further established that banks have clear cut credit policies objectives stated in their credit manuals that enables them achieve their business objectives such as cost cutting, widening of the revenue base and staff training.

Table 6: Credit Manual

	Frequency	%
Have credit manuals	27	100
Don't have credit	0	0
manuals		

# 4.5 The 7Cs of Appraising Credit Risk

In order to establish the criteria that banks use in credit risk evaluation, assessment and appraisal, respondents were asked to specify the factors that that they considered in credit evaluation, appraisal and assessment for their customers. The findings were as follows; 85.20% of the respondents considered character as the major criteria that was used in credit risk evaluation, appraisal and assessment for their customers, 77.78% considered collateral as the main criteria in credit risk assessment, evaluation and appraisal for their customers, 70.37% considered capacity and condition as the main criteria in credit risk evaluation, assessment and appraisal for their customers, 59.26% considered control as the main criteria in credit risk assessment, evaluation and appraisal for their customers, 55.56% of the respondents considered common sense as the main criteria in credit risk assessment, appraisal and evaluation for their customers, 51.85% of the respondents considered contribution as the main criteria used in credit risk appraisal, assessment, evaluation and assessment for their customers.

Table 7: Factors Considered in Credit Risk/Evaluation/Appraisal and Assessment

Factors	Least considered	d	Most considered		
	Frequency	%	Frequency	%	
Character	4	14.80	23	85.20	
Capacity	8	70.37	19	70.37	
Condition	8	70.37	19	70.37	
Collateral	6	22.22	21	77.78	
Contribution	13	48.15	14	51.85	
Common	12	44.44	15	55.56	
sense					
Control	11	40.74	16	59.26	

The above data was subjected to further statistical analysis that involved the determination of the mean and standard deviation. The result of the analysis revealed that the character of an individual was a paramount criterion in the assessment of credit. Character had the highest mean of 4.3856 with a standard deviation of 0.51733, followed by collateral with a mean of 3.9926 and standard deviation of 0.85841, followed by condition with a mean of 3.9537 and a standard deviation of 0.60462, followed by capacity with a mean of 3.7222 and a standard deviation of 0.56896, followed by control and common sense that both had a mean of 3.6904 and a standard deviation of 1.00436 and 0.10044 respectively and lastly by contribution with a mean of 3.6204 and a standard deviation of 0.66640.

**Table 8: Descriptive Statistics of Borrower Selection Criteria** 

	N	Minimum	Maximum	Mean	Std
					deviation
Character	27	3.30	5.00	4.3856	0.51733
Capacity	27	2.75	4.75	3.7222	0.56896
Condition	27	2.50	5.00	3.9537	0.60462
Collateral	27	2.25	5.00	3.9926	0.85841
Common	27	1.00	4.75	3.6904	0.10044
sense					
Contribution	27	2.25	5.00	3.6204	0.66640
Control	27	0.00	4.67	3.6904	1.00436

## 4.6 Default Rate and its Determination

Respondents were asked to provide the default rate on their advance portfolio and how they determine that a client/customer has defaulted or is about to default. It should be noted that where banks do not adhere to desired lending procedures and practices the default rate in the loans advanced to clients/customers is bound to be high.

**Table 9: Default Rates** 

Default	1-5%	6-10%	11-15%	16-20%	Above	Total
%					20%	
Bank	0	11	12	4	Nil	27
Banks %	0	40.74%	44.44%	14.81%	Nil	100%

Source: Research Data 2010.

# 4.7 Factor Analysis of the 7Cs Against Asset Quality Ratio

The data on the 7Cs was further subjected to factor analysis taking into account the asset quality ratio of the banks and the 7Cs. The results of the analysis were as per the table.

Table 10: 7Cs against Asset Quality ratio

Correlation Matrix for all the variables

	Asset	Character	Capacity	Condi	Collate	Contrib	Control	Common	Significance
	quality			tion	ral	ution		sense	1 tail test
	ratio								
Asset quality	1	-0.734	-0742	-0.527	-0.082	-0.274	-0.380	-0.513	-
ratio									
Character	-0.734	1	0.567	0.527	0.307	0.349	0.308	0.577	0.000
Capacity	-0742	0.567	1	0.373	0.141	0.180	0.388	0.335	0.000
Condition	-0.527	0.527	0.373	1	0.314	0.557	0.149	0.617	.0002
Collateral	-0.082	0.307	0.141	0314	1	0.049	0.102	0.335	0.342
Contribution	-0.274	0.349	0.180	0.557	0.049	1	0.569	0.467	0.084
Control	-0.380	0.308	0.388	o.149	0.102	0.569	1	0.210	0.025
Common	-0.380	0.577	0.335	0.617	0.393	0.467	0.210	1	0.003
sense									

Determinant=0.014

Source: Research Data, 2010

On testing for multicolinearity, collateral and contribution were found not necessary before factor analysis was run, since they had significances that were greater than 0.05, That is 0.342 and 0.084 respectively, hence calling for there removal.

Table 11: Correlation Matrix After Removing Two Variables

	Asset	Chara	Capacity	Condition	Common	Control	Significan
	quality ratio	cter			sense		1 tail test
Asset quality	1	-0.734	-0.742	-0.527	-0.513	-0.380	-
ratio							
Character	-0.734	1	0.567	0.527	0.577	0.308	0.000
Capacity	-0.742	0.567	1	0.373	0.335	0.388	0.000
Condition	-0.527	0.527	0.373	1	0.617	0.149	.0002
Common	-0.380	0.577	0.335	0.617	1	0.210	0.003
sense							
Control	-0.380	0.308	0.388	0.149	0.210	1.00	0.025

Determinant=0.060

Source: Research Data, 2010

The following were the findings from the analysis:

All banks use the 7Cs in credit appraisal/assessment and evaluation. This was supported by the inverse relationship that exists between the asset quality ratio and the 7Cs.

55% of the level of non performing advances in the banking industry can be predicted by failure to ascertain the capacity of the borrowers to repay the loan [(-0.742X-0.742) X100%], 53.90% of the level of non performing advances can be predicted by failure to ascertain the character of the borrowers [(-0.734X-0.734) X100%], 27.78% of the level of non performing advances can be predicted from failure by banks to properly ascertain the conditions borrowers thrives in [(-0.527x-0.527)]x100%] . 26.32% of the level of non performing advances can be predicted from failure by the banks staff to make logical conclusion on the borrowers need for the loan and failure to properly scrutinize the data supporting the loan application. and 14.44% of the level of non performing advances can be predicted by failure by banks to ascertain the business control measures that the

borrower has put in place [(-0.380x-0.380)x100%]. It should be noted that all these variables are very significant at 5% significant level.

It can be concluded that where capacity, character, condition, common sense and control are given the least consideration in the credit appraisal, assessment and evaluation process, there will be high levels of non performing advances among commercial banks even if the other 2Cs (contribution and collateral are given the highest consideration.

The findings in this study are that; capacity impacts highly on non performing loans followed by character, condition, common sense and control in that order.

## 4.8 The importance of various risks

The respondents were asked to list and state the significance of various financial risks to their banks. The findings were that: the most important risk was credit risk with a mean of 4.59 and standard deviation of 0.797, followed by liquidity risk with a mean of 4.48 and a standard deviation of 0.643, followed by foreign exchange risk and strategic risk that had a mean of 3.85 each with a standard deviation of 0.925, follwed by strategic risk that had a mean of 3.85 with a standard deviation of 0.925 and 0.989 respectively, followed by interest rate risk that had a mean of 3.48 and a standard deviation of 1.051 and lastly operational risk that had a mean of 3.44 and a standard deviation of 1.121. From the findings ,it can be concluded that banks attach great significance to credit risk than any other risk.

Table 12: Importance of various risks

Type of risk	N	Minimum	Maximum	Mean	Standard
					deviation
Credit risk	27	2	5	4.59	0.797
Liquidity	27	3	5	4.48	0.643
risk					
Interest	27	1	5	3.48	1.051
rate risk					
Operational	27	1	5	3.44	1.121
Strategic	27	1	5	3.85	0.989
risk					
Foreign	27	1	5	3.85	0.925
exchange					
risk					

Source: Field Research Data 2010

#### 4.9 Conclusion

The focus of the study was to establish the use of the 7Cs credit appraisal model by commercial banks in Kenya and ascertain the impact/effect of the use of this model on the level of non performing advances. The findings of the study are that; banks use 7Cs in credit appraisal, assessment and evaluation processes and the capacity of the borrower to repay the loan impacts heavily on the level of non performing loans in commercial banks followed by: character, condition and common sense. The findings in similar studies on the subject matter by: McGoven, (1993), Abedi, (2000) and Mutwiri, (2003) were that character is a paramount factor of credit and a major component in the decision to lend money followed by capacity, condition, control and common sense in that order. The findings in this study are that banks now attach more importance to capacity than

character in their credit appraisal, evaluation and assessment processes than ever before. The difference in the order of significance of these variables could be attributed to the changes in social, political and economic environment that have been witnessed in Kenya since the year 2003, the changes in bank policies on lending as they try to position themselves in the competitive market and changes in the Central Bank of Kenya prudential guidelines.

The findings of the study are in tandem with the declining trend of the asset quality ratio for the period spanning 2003 to 2009 being 28.80% in 2003, 21% in 2004, 18% in 2005, 14.90% in 2006, 10.64% in 2007, 9.23% in 2008 and 8% in 2009. (Central Bank of Kenya Banks Annual Supervision Reports).

#### CHAPTER FIVE

# SUMMARY OF THE FINDINGS AND CONCLUSIONS RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

# 5.1 Summary of the Findings and Conclusions

The objectives of the study were: to ascertain the use of the 7Cs credit appraisal model (character, capacity, contribution, collateral, common sense, control and condition) by commercial banks and to determine the effect of the use of the 7Cs credit appraisal model on the level of non performing advances of commercial banks in Kenya.

Primary data was collected via a questionnaire distributed to 43 commercial banks. Secondary data was collected from the banks annual financial reports and The Central Bank's Banks Annual Supervisory Reports for the period spanning 2004-2009. The data collected was analyzed using descriptive statistics and the conclusions drawn from the information was derived/obtained from the frequency tables, means and standard deviations. Factor analysis was used in drawing conclusions on the effect of the 7Cs credit risk appraisal, assessment and evaluation on the level of non performing advances of Kenya's commercial banks.

## 5.1.1 Summary of the Findings:

70.30% of banks in Kenya are privately owned. Of these banks, 48.1% were established between 1980 and year 2000. Banks render a wider range of products and services to their customers. These include deposit schemes, overdraft facilities safety vaults, personal loans, mortgage financing, money transfer, and micro-finance services among others. All the banks have credit manuals whose contents are used in credit risk appraisal, evaluation and assessment and are revised on an annual basis.

Banks in Kenya use the 7Cs in credit risk appraisal, assessment and evaluation processes when ascertaining the creditworthiness of their customers and capacity is the most significant factor in credit risk assessment, appraisal and evaluation process followed by character, condition, common sense and control in that order. Banks attach a great significance to credit risk, followed by liquidity risk, foreign exchange risk, strategic risk, interest rate risk and operational risk in that order.

#### 5.1.2 Conclusions and Recommendations

Risk is cororally related to competitiveness and profitability of banks. The higher the risk the higher the profit. Hence it is important for banks management to understand how they can edge themselves against the eminent dangers of over exposure to credit risk whose importance can not be underscored as can be realized from the findings that can impact negatively on their profitability. This can be achieved through strong adherence to the use of 7Cs credit appraisal model.

The results of this study are in line with a considered view in the banking literature and provide an important insight for banks lending process appropriate culture and lending policy designed taking into consideration the credit risk evaluation, assessment and appraisal procedures.

## 5.2 Limitations of the study

The study faced some limitations with respect to the time frame within which the data was to be collected from respondents. The respondents were very busy hence requiring constant reminder so as to attend to the questionnaire. Out of the 43 questionnaires send to the field, 17 were not received back. The receipt of this could have led to an improvement in the conclusions drawn in the study.

Finance aspect had some limiting factors too. The period of data collection entailed a lot of traveling and frequent communication with the respondents making it an expensive exercise all together. At the same time the inadequacy of finances did not allow me to employ sophisticated data analysis measures that could have improved my findings tremendously.

Some banks could not volunteer all the vital information that I had requested through my questionnaire, they pledged of confidentiality of the data held on behalf of the clients. The same case applied to Central Bank of Kenya who in some cases referred me to get some data directly from individual banks despite the fact that they had the data in their custody. Could I have accessed some of this data, my findings could have improved.

## 5.3 Suggestions for Further Research

Further study need to be conducted in the following areas:

The impact of moral hazard on credit risk administration in Kenyan commercial banks. Moral hazard in credit mainly arises from information asymmetry. If information asymmetry is not checked, it will lead to obtaining of improper information that subsequently leads to wrong credit decisions.

The effect of credit rationing on the level of non performing advances in the banking sector in Kenya. The concept of credit rationing in banks describes a situation whereby banks limit the supply of loans though they have sufficient funds to lend out and the supply of loans has not outstripped the demands of the prospective borrowers

Why foreign banks have been successful in Kenya Vis as viz the locally incorporated banks. This can be attributed to the adoption of sound lending practices in the right market segment coupled with assigning duties to a highly skilled management team. The practice of lending to

borrowers in the high risk market segment at high interest rates has greatly increased the level of non performing loans amongst the local banks, more so insider lending has contributed to a substantial proportion of bank failures among local banks examples include Trade Bank and Pan African Bank that involved extensive lending mainly to politicians

The effect of the changes in social, economic and political environment on the use of the 7Cs credit appraisal model by commercial banks in Kenya. Taking into consideration the improved political goodwill that has attracted foreign investments since the National Rainbow Coalition formed a government in 2003, improvement of the initially delipalidated infrastructure, high economic growth rate that were witnessed after the year 2003 coupled with increased literacy levels as a result of the introduction of free primary education and highly subsidized secondary education.

#### REFERENCES

- Abedi S. (2002). Highway to Success. Credit Management Journal (Electronic Edition).source,http://leathersprinters.com/ do you talk to your banker.Html.
- A Guide To Wise Management of Loans from Banking Institutions Central Bank of Kenya (1997). Published by Central Bank of Kenya.
- Bank of Mauritius (2003). Guidelines on Credit Risk Management,
  Published By Bank of Maturities.
- Basel (1999)."Banking Supervision, Principles for the Management of Credit" Published by the Basel Committee.
- Bhide M.G. Prasad A.& .Ghosh S. (2003).Banking Sector Reform: A Critical Overview, Economic and Political Weekly, February 2.
- Bloem A.M. & Gorters C.N. (2001). The Macroeconomic Statistical Treatment of Non Performing Loans. Discussion Paper, Published by The Statistics Department of the International Monetary Fund, December.
- Butterworths B. (1990). Risk Management, A Modern Perspective, Published by McGraw Hill.
- Caprio G. & Kilngbiel D. (2002). Episodes of Systemic Borderine Financial Crisis, The World Bank (unpublished work).

- Central Bank of Kenya (2009), (2008), (2007), (2006), (2005), (2004) & (2003). Annual Banks Supervision Reports. Published by Central Bank of Kenya.
- Central Bank of Kenya (2008). Prudential Guidelines For Institutions licensed under the Banking Act. Published by Central Bank of Kenya.
- Clarke C. J. and Survirvarma (1999). Strategic Risk Management: The New Competitive: Long Range Planning volume 32, Published by Elsevier ltd.
- Cornet M. M. Saunders A. Financial Institutions Management (2008).

  McGraw Hill Boston 6<sup>th</sup> Edition.
- Dhanuskodi R. A. (2006). Study on 'Non Performing Assets (NPAs)) with Special Reference to Commercial Bank of Ethiopia (CBE), unpublished Research Report submitted for the Fourth International conference on Ethiopia Economy June.
- Cooper D.R.& William C. E. (1995). Business Research Methods, Published by McGraw Hill Company.
- Dorfman M. S. (1997). Introduction to Risk Management and Insurance, 6<sup>th</sup> Edition Published by Prentice Hall ltd.
- Edwards B. (1997). Credit Management Handbook, Fourth Edition Published by Gower publishing Company.
- Fahim A. (2009). Credit Appraisal Technique, Finance and Markets Magazine of Pakistan, Nov 12 & 18.

- Fuentes R. and Carlos M. (1998). Determinants of loan repayments in Chile, School of Business and Economics Universidad de Chile
- Kaufman G.G. (1995). Bank Failures, Systematic Risk, and Bank Regulation. The Cato Journal, Chicago vol.16,issue 1.
- Gardiner M.J., Mills D.L.& Cooperman E.S. (2000). Managing Financial Institutions an Asset Liability Approach 4<sup>th</sup> edition.
- Gerschick J. A. (2002). Credit Evaluation Grids for Micro lenders: A Tool For Enhancing Scale Efficiency. Published by The Aspen Institute United States of America.
- Greuning H.V, & Bratanovic S.B. (1999). Analyzing Banking Risk a Framework for Assessing Corporate Governance and Financial Risk Management, Published by The World Bank.
- Hempel G.H, Simson D.G & Coleman A.B (1994). Bank Management: Text and Cases, Fourth Edition, Publishers, John Wiley & Sons, Inc.
- Hull J. (2007). Risk Management & Financial Institutions, Published By Pearson inc. ltd
- Islam et al (2005). Non Performing Loans. It's Causes Consequences and Some learning. Unpublished work, American International University, Bangladesh, East West University, Bangladesh Stamford .University Bangladesh.
- Kabiru (2002). A Research Survey Focusing on the Relationship Between Credit Risks and Ability to Collect Debts, Unpublished MBA project University of Nairobi.

- Kassim A.J. (2002). Risk Asset Management In Financial Institutions: Bank Experience Union Digest Vol, 7,No,1&2 December(Lagos Union Bank of Nigeria).
- Kent C. and Patrick D. (2002). Cyclical Prudence-Credit cycles in Australia, BIS papers No.1
- Krishna C.V. (2006).Causes for Non performing Assets in Public Sector .

  Source

  http://www.indianmba.com/Faculty\_Column/FC56/fc56.html
- Loretta J. (1997). Business Review Magazine Sep- Oct., Federal Reserve Bank of Philadelphia.
- Matter L.C, (1972). The lending Banker 4th edition Published by Waterlow and Sons Ltd.
- McGoven J. (1998). Why Bad Loans happen to Good banks. The Journal of Commercial Lending, Philadephia: Feb. 1993 vol. 75, issue 6.
- Mishkin (1998). Financial Markets & Institutions , 2<sup>nd</sup> edition, Published by Anderson. Wesley.
- Mohan R. (2004). Finance For Industrial Growth, Reserve Bank of India Bulletin Speech article, March.
- Muniaeppan G.(2002), The NPA Overhang, Magnitude, Solutions and legal reforms, Reserve Bank of India.

- Mutrwri (2003). The Use of 6Cs Credit Risk Appraisal Model and its Relationship with the level of NPAS of Commercial Banks in Kenya.

  Unpublished MBA project University of Nairobi
- Prahlad S.(2002). Risk Management By Banks in India, IBA, Bulletin July.
- Pyle H. D. (1997), Bank Risk Management Theory. Research working papers in Finance working paper RPF- 272 Conference on Mismanagement and regulation in Banking Jerusalem, May17-18.
- Rajiv R. and Sarat C. D.(2003). Non Performing loans and Terms of Credit of Public Sector Banks in India: An Empirical Assessment.
- Reddy (2004). Corporate Governance In Banking & Finance, Published by Tata McGraw-Hill Publishing co.
- Rekha A. and Kotreshwar G. (2005).Risk Management in Commercial Banks (A Case study of public and private banks in India) Discussion Paper.
- Saunders A. (2002). Financial Institutions Management. a Modern Perspective, Third Edition Published by McGraw hill.
- MacDonald S. & Timith W. K. (2006), Management of Banking, 6<sup>th</sup> Edition Published by Pre- Press Comm. Inc.
- Sergio,M, (1996).Non Performing Bank Loans: Cyclical Patterns and Sectoral Risk, Review of economic conditions in Italy.Rome:Jan-Jun Issue 1.

- Sinkey J.F Fr. (1992). Commercial Bank, Financial Management: In the Financial Services Industry, Fourth edition, Published by Macmillan Publishing Company.
- Somoye R.O.C. (2010). The variation of Risk on Non performing loans on Bank Performances in Nigeria. Indian Journal of Economics and Business/Article date March 1.

Central Bank of Kenya (2006). The Banking Act Cap 488 of the laws of Kenya. Printed by Government Printers of Kenya.

Central Bank of Kenya (2006). The Central Bank of Kenya Act Cap 491 of the laws of Kenya. Printed by Government Printers of Kenya.

Company Act Cap 486 (2009). Printed by Government Printers of Kenya.

- The Chartered Institute of Bankers (1997). Strategic Marketing Management, Published by The Institute of Financial Services United Kingdom
- Thygerson K.J. (1995). Management of Financial institutions, 6<sup>th</sup> edition Published by Haper Collins College Publishers.
- Waweru M. Nelson (2009). Commercial Banking Crises; In Kenya Causes and Remedies, Published By Global Journal of Finance and Banking vol. 3 no. 3.
- Yeager F.C.(1989). Financial Institutions Management Text and Cases, 3<sup>rd</sup> edition Published by Prentice Hall Inc.

## STUDY QUESTIONNAIRE:

## **CREDIT APPRAISSAL MODEL:**

1. Name of your Bank (Option	nal)	
2. Please state the year in wh	ich t	the bank was established in Kenya
Before 1950s [ ]		
1951-1960 [ ]		
1961-1970 [ ]		
1971-1980 [ ]		
1981-1990 [ ]		
1991-2000 [ ]		
2001-2010 [ ]		
Other (specify)		
3. What are its ownership pro	oport	tions?
(1) Government	[	%]
(2) Public	[	%]
(3) Individual	[	%]
[4] Any other, specify		

4. What are the products and service	es rendere	ed by yo	ur Banl	k?							
Tick where appropriate											
(1) Small and Micro Enterp	rises fina	ncing [	]								
(2) Personal loans		[	]								
(3) Funds Transfer		[	]								
(4)Mortgage financing		[	]								
(5) Asset financing		[	]								
[ 6]Other please specify											
5. Which among the following factors establishing a credit policy?	tors does	your ba	nk cons	sider wh	ıen						
	Least fa	ctor	Most factor								
	1	2	3	4	5	5					
(1) Prevailing economic conditions	. [ ]	[ ]	[ ]	[ ]	[	]					
(2) Competitors activities	[ ]	[ ]	[ ]	[ ]	[	]					
(3) The current credit policy in pla	ice [ ]	[ ]	[ ]	[ ]	[	]					
(4) Market strength of the Bank.	[]	[ ]	[ ]	[ ]	[	]					
(5) The funds available for lending	[]	[ ]	[ ]	[ ]	[	]					
(6)For any other please specify	•••••		•••••		•••••	••••					
6. Does your bank have a credit police  Tick where appropriate  (1) Yes [ ]  (2)No [ ]	cy and wr	itten cro	edit ma	nual?							

7. If yes, what are some of 'its' importan	nt contents?	(Mentio	n all th	at app	ly)			
					· <b></b>			
8. In absence of a written credit manual	l, what reaso	n expla	in for a	absence	e of			
one?								
	Least reas	on	m	most reason				
	1	2	3	4	5			
(1) Complications in development	[ ]	[ ]	[ ]	[ ]	[ ]			
(2) Lack of necessity	[ ]	[ ]	[ ]	[ ]	[ ]			
(3) Prohibitive cost of development	[ ]	[ ]	[ ]	[ ]	[ ]			
(4) The rigidity nature of the credit	manual[ ]	[ ]	[ ]	[ ]	[ ]			
(5) For any other, please specify								
•••••	•••••	• • • • • • • • • • • • • • • • • • • •	••••••	•••••	•••••			
•••••	•••••	• • • • • • • • • •	••••••	•••••	•••••			
	•••••	• • • • • • • • • •	••••••	•••••	•••••			
	•••••	• • • • • • • • • •	••••••	••••••	•••••			
9. How often does your bank review 'its'	credit policy	or mar	nual?					
Tick where Appropriate								
(1) Quarterly [ ]								
(2) Semi-annually [ ]								
(3)Annually [ ]								
(4)For any other please specify								

10. Which among t	he following do you co	onsider be	fore ava	ailing c	redit to	a						
Customer/a cl	ient of the bank?											
(1) Character	[go to question 11]											
(2) Conditions	[go to question 12]											
(3) Capacity	[go to question 13]											
(4) Contribution	[go to question 14]											
(5) Collateral	(5) Collateral [go to question 15]											
(6)Control	[go to question 16]											
(7)Common sens	e [go to question 17]											
11. The character o												
	Leas	st consid			consi							
		1	2	3	4	5						
(1)The customers	s willingness to repay	[ ]	[ ]	[ ]	[ ]	[ ]						
(2)The hanks nas	st experience with the											
customer	wentened with the	[ ]	[]	[ ]	[ ]	[ ]						
0.000011101		l J		l J	LJ	. ,						
(3) What those who	o have done business											
with the Prospe	ective borrowers											
have to say abo	out its business practi	ices [ ]	[ ]	[ ]	[ ]	[ ]						
(4). Information ob	tained from											
credit bureau		[ ]	[ ]	[ ]	[ ]	[ ]						
	ts											

12. Conditions	Least considered Most consid						dered	
	1	2	3	4		5		
(1)The competitive landscape of the								
borrowing company in its busines	ss							
environment	[ ]	[ ]	[	]	[ ]	[	]	
(2)The customer's payment history								
on existing credit relationships								
whether personal or commercial	[ ]	[ ]	[ ]	[	] [	]		
(3) Supply risks and Industry issu	ues [ ]	[ ]	[ ]	[	] [	]		
(4)The logical need for the funds	[ ]	[ ]	[ ]	[	] [	]		
13. Capacity	Least o	onside:	ed I	Most	cons	ider	ed	
		1		2	3	4	5	
(1)The borrowers willingness to rep	ay the del	ot [ ]	[ ]	] [	] [	] [	]	
(2)The business ability to generate	enough fr	ree						
cash flows.		[ ]	[	] [	] [	] [	]	
(3)The risk of cash flows falling sho	ort of the							
expectation		[ ]	[	] [	][]	] [	]	
(4)The customers cash balances in	bank acco	ount[ ]	ſ	1	[][]	1 [	1	

14. Contribution	Least considered Most consider						d
		1	2	3	4	5	
(1)The availability of sufficient cap	ital						
that provides a cushion to with	nstand						
a blif in its ability to							
generate cash flows		[	] [ ]	[ ]	[ ] [	]	
(2)The amount of capital invested b	oy the						
borrower in the business		[	] [ ]	[ ]	[ ]	[ ]	
(3)The amount of financing being	sought						
compared to the business capital		[	] [	] [	] []	[	]
(4)Whether the borrower has any	other						
funds			] [	] [	] [	] [	]
15. Collateral							
	Least co	nsi	dered	Most	consi	dere	d
	1		2	3	4	5	
(1)The sufficiency of the proposed co	ollateral [	]	[ ]	[ ]	[ ]	[	]
(2)The value of the collateral	[	]	[ ]	[ ]	[ ]	[	]
(3)Availability of secondary market f	or the						
Collateral	]	]	[ ]	[ ]	[ ]	[	]
(4)The class in which collateral lies	whether						
Inventories or fixed assets	[	]	[ ]	[ ]	[ ]	[	]
(5)Availability of personal guarantee	of						
the directors	[	]	[ ]	[ ]	[ ]	[ ]	

iside	red		Мо	st	cor	ısid	ere	d	
	1	2		3		4		5	
nt [	]	[	]	[	]	[	]	[	]
d of									
[	]	[	]	İ	]	[	]	[	]
[	]	[	]		[ ]	[	]	[	]
ealt									
[	]	[	]	ĺ	]	[	]	[	]
nside	red	<u>l</u>		Me	ost	CO	nsio	lere	d
1				3		4	_		5
•	]	_	]	_			[ ]	[	]
	nt [ d of [ ealt  nside 1 nt [	t [ ] d of [ ] ealt [ ]	1 2  nt [ ] [  d of         [ ] [  ealt  nsidered         1 2  nt [ ] [	1 2  nt [ ] [ ]  d of  [ ] [ ]  ealt  [ ] [ ]  nsidered  1 2  nt [ ] [ ]	1 2 3  nt [ ] [ ] [  d of  [ ] [ ]    ealt  nsidered Me  1 2 3  nt [ ] [ ]	1 2 3  nt [ ] [ ] [ ]  d of  [ ] [ ] [ ]  ealt  nsidered Most 1 2 3  nt [ ] [ ] [ ]	1 2 3 4  nt [] [] [] [  d of  [] [] [] [] [  ealt  nsidered Most condition of the condition	1 2 3 4  nt [ ] [ ] [ ] [ ]  d of  [ ] [ ] [ ] [ ]  ealt  nsidered Most considered 1 2 3 4  nt [ ] [ ] [ ] [ ]	nt [ ] [ ] [ ] [ ] [ ] [ ] d of  [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [

17. Common Sense							
Least con	nside	ere	d	Most	consid	ered	
	1		2	3	4	5	
(1)Natural ability to make good judgmen about the borrowers business by the le	_	-	[ ]	[ ]	[ ]	[ ]	
(2)How the borrower presents his/her da	ata [	]	[ ]	[ ]	[ ]	[ ]	
(3)The socio – political environment in							
which the borrower operates	[	]	[ ]	[ ]	[ ]	[ ]	
(4)Reasonableness of the financial data Provided by the borrower	[	]	[ ]	[ ]	[ ]	[ ]	

18. During the credit evaluati	ion prod	cess by y	our ban	k whic	h fao	ctor	s do	)
You consider?								
	Most	COI	nsic	lere	d			
		1	2	3	4			5
(1) Competitive position of t	he	[ ]	[ ]	[ ]	[	]	[	]
borrowers business In t	he mar	ket						
(2) Character and quality of	the							
top management		[ ]	[ ]	[ ]	[	]	[	]
(3) The quality of data supp	orting t							
application	[ ]	[ ]	[ ]	[	]	[	]	
(4)The capital base of the b	r [ ]	[ ]	[ ]	[	]	[	]	
(5)The prevailing economic	conditi	ons						
In the country	[ ]	[ ]	[ ]	[	]	[	]	
Explain briefly						ng	••••	••••
Least	signifi	cant Mo	st signi	ficant				
	1	2	3	4	5			
(1) Liquidity risks	[ ]	[ ]	[ ]	[ ]	[	]		
(2) Credit risk	[ ]	[ ]	[ ]	[ ]	[	]		
(3) Interest rates risks	[ ]	[ ]	[ ]	[ ]	[	]		
(4) Foreign exchange risks	[ ]	[ ]	[ ]	[ ]	[	]		
(5) Operational risks	[ ]	[ ]	[ ]	[	]			
(6) Strategic risks	[ ]	[ ]	[ ]	[	]			
(7) Any other, specify								

21. A	After	how	long	does	your	bank	consider	that a	client	has	defaulte	d in
]	loan	repa	ymer	ıt.								

	Least consid	dered	most considered				
	1	2	3	4	5		
(1) When installment and inter	est						
are one month in arrears	[ ]	[ ]	[ ]	[ ]	[ ]		
(2) When installment and inter	est						
are two months in arrears	[ ]	[ ]	[ ]	[ ]	[ ]		
(3) When interest & installme	ents are						
3 months in arrears	[ ]	[][	] [	] [	]		
(4) Any other, please specify	[ ]	[ ] [	] [	] [	]		
(5) Any other, specify.	[ ]	[][	] [	] [	]		
22. What is your banks defactients?			-				

Thank you for taking your time to answer these questions.