CREDIT RISK MANAGEMENT IN FINANCIAL INSTITUTION A CASE STUDY OF NMB PUBLIC LIMITED (NMB PLC)

GERALD A. SEMGOMBA

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR THE DEGREE OF MASTERS OF BUSINESS ADMINISTRATION (MBA) OF THE OPEN UNIVERSITY OF TANZANIA

2013

CERTIFICATION

I, undersigned, certify that we have read and hereby recommend for acceptance by the Open University, a dissertation entitled **Credit Risk Management in Financial Institution a case study of NMB Public Limited (NMB PLC)** in partial fulfillment of the requirements for the award of the degree of Masters of business administration in the Open University of Tanzania.

Signature

Dr. B. Mutagwaba

(Supervisor)

Date

COPYRIGHT

DECLARATION

I, Gerald A. Semgomba**,** declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

Signature

Date

DEDICATION

To:

My late beloved parents A. Semgomba and my wife Stella P. Makere, Whom I shall always remain greatly indebted for their untiring love and their moral and material support and who laid the foundation for my education. I thank God the almighty for all this.

and

To all people who helped me materially and /or spiritually.

May almighty God bless you all!

ABSTRACT

The main aim of the study was to asses Credit Risk Management in Financial Institution a case study of NMB Public Limited (NMB PLC). Both qualitative and quantitative data were collected using structured questionnaire, focus group discussion and on site observations.

The study revealed that majority of NMB workers (90.4 %) acknowledged to have risk management unit and (79.2%) to have policies and procedure to monitor and control credit risk Moreover 5.2% of the respondents reported that, have credit section staff.

Absence of entrepreneur skill to SMEs this can major constraints to reduced risk credit.

Based on the findings of the present study, formulation of credit information bureau will assist on stakeholders to deals with multiple loan problem.

ACKNOWLEDGEMENTS

This work is a product of combined efforts of different people at different capacities. My profound gratitude goes to my supervisor Dr. B. Mutagwaba for a number of months of mentoring, guidance, kindness suggestions and encouragement that made the research and writing of this work possible. Thanks for the many hours you spent guiding me through the numerous questions that I had.

My appreciation also goes to my colleagues MBA finance student in Open University Of Tanzania for their cooperation and constructive criticism at the time we were together in this programme.

Special gratitude is also extended to Mr. Charles B. Masolwa who is Chief Accountant Ministry of Agriculture Food security and cooperatives and all fellow workers.

To those and others whom I did not mention their names I real appreciate their contribution and moral support.

Finally my thanks go to almighty God who watches over in my life.

TABLE OF CONTENTS

LIST OF TABLE

LIST OF FIGURES

LIST OF ABBREVIATIONS AND ACRONYMS

ABSA	Amalgamated Bank of South Africa
BLS	Bank Lending Survey
FLS	Financial Institution Survey
MFI	Micro Finance Institution
MSEs	Micro and Small Enterprises
NBC	National Bank of Commerce
NMB PL	National Microfinance Bank Public Limited Company
NPLs	Non Performing Loans
SACCOS	Savings and Credit Cooperatives Society
SAPs	Structural Adjustment Programmes
SMEs	Small and Medium Enterprises
NGOs	Non Governmental Organizations
NSGRP	National Strategy for Growth and Poverty Reduction
URT	United Republic of Tanzania

CHAPTER ONE

1.0 INTRODUCTION

1.1 Overview

Between mid 1980s and 1990s Tanzania faced economic hardships, which necessitated reforms including Structural Adjustment Programmes (SAPs) to be introduced. The SAPs aimed at improving macroeconomic management, tackling underlying structural weaknesses and encourage active private sector participation in the economy. Due to the economic hardship, Tanzania embarked on economic reforms which transformed the country from socialist orientated to free market economy. These reforms were instituted through, among other things, privatization and trade liberalization policies, which were applied to the financial and non financial sectors.

By 1991, lending to financial distressed parastatals and cooperative unions hit the ceiling. The National Bank of Commerce (NBC) suffered large non-performing loans (NPAs) equal to 70% of the total bank's lending portfolio (Chijoriga, 2001). This necessitated the restructuring of NBC into NMB Limited and NBC (1997) Limited. NBC (1997) Limited was privatized and sold to the Amalgamated Bank of South Africa, (ABSA). NMB Limited remained under government ownership but later the majority stake was sold to Rabo Bank of Netherland.

Following such failures by banks, as NBC was the largest commercial bank in the financial sector in Tanzania, efforts were made to restructure the banking sector by focusing on promoting greater competition and strengthening further bank supervision. In January 2001 the Bank of Tanzania (BOT) issued banking regulations with regard to capital adequacy, credit and risk management. The reform bore fruits and assisted on formation of business activities such as small and medium enterprises (SMEs). These SMEs are increasingly becoming important actors in stimulating developments throughout Africa, and Tanzania is not spared. As SMEs develop, living standards of owners and society in general improve overtime hence widened the demand for formal credit facilities. This is because most SMEs cannot raise capital on their own.

Therefore investors resolved to borrow from financial institutions. In return, and what happens today, many financial institutions, commercial banks, regional banks, SACCOs, VICOBA, embarked on offering more credit to the deficit spending unit of the society, with less strict guarantees or collaterals.

This study indicates that monies which are borrowed by the entrepreneurs are committed in business activities on the back of generating a hand money return at the end of the day. However, any businesses undertaking are subjected to various risky environments. One of major risk in banking industry is the credit risk and yet almost all banks derive a significant proportion of their income from lending operations. Practically, this is a core business of any financial institution which determines its survival, growth, and development of the monetary to maximize profit at the end. Therefore the more financial institution lends prudently the better chances of making a hefty profit at the close of a business calendar.

Lending process has multiplied effect. Therefore the credit risk management in the financial institutions is a critical issue which is to be carried out cautiously so that banks benefited from the lending. Studies have found that adequately managing credit risk in financial institutions is critical for their survival and growth (Wenner et al, 2007). Also a good credit risk management policies lead to a lower loan default rate and relative higher interest income. Effective credit risk management system minimizes the credit risk, thus the level of loan losses (Richard et al, 2008).

The effective management of credit risk is a significant part of a comprehensive approach to risk management and essential to the long-term success of any banking organisation.

Considering the importance of lending to both financial institution and the economic development of the country, particular attention should therefore be drawn to ensure thorough and appropriateness handling of the exercise. To earmark those who are loyal and faithful customers in terms of creditworthiness, a careful analysis of customer should be done to identify those creditors who comply with the firm's lending conditions. A credit reference bureau usually helps but the country lacks one. According to BOT, such bureau was established in 2013.

1.2 Background Information of the Study

Financial Institutions play a big part in economic development of any country. An economy with a shortage of Financial Institutions will suffer from low saving rate which in turn will result in slow economic growth (Brandl, 1998) as it hinders investments. The role of financial institution is similar to that of arteries in the human body, because Financial Institutions channel monetary resources for the economic growth of any country just like arteries channel blood to human body (Shanmugan and Bourke, 1990). Financial institutions have faced difficulties over the years for a multitude of reasons, the major cause of serious banking problems continues to be directly related to lax credit standards for borrowers and counterparties, poor portfolio risk management, or a lack of attention to changes in economic or other circumstances that can lead to a deterioration in the credit standing of a bank's counterparties. This experience is common in both G-10 and non-G-10 countries. Internal reasons given for the bank failures include reckless lending, corruption, non-use of prudent classification risk assessment methods, fraud and management deficiencies. External factors such as deregulation; lack of information among bank customers; homogeneity of the banking business; and connections among banks do cause bank failure.

More lenient credit risk management by banks may partly contributed to a gradual easing of credit standards applied to loans and credit line to borrowers (Altunbas, et al, 2009). This is also supported by the results of the Bank Lending Survey (BLS) for the Euro area and evidence from the United States (Keys et al., 2008 and Dell' Ariccia et al., 2008).

Number of studies have been done on the problem of credit risk management in financial institutions and identify some factors that account for difficulties (Credit Risks) in the banking industry. Some of these studies includes Brown Bridge and Harvey, 1998, Basel 1999, Basel 2004, Kimei 1998, Chijoriga 1997, Saunders, 1994; Williams, 1995, Key et al, 2008 and Dell' Ariccia et al., 2008).

The level of loses caused by credit risk is higher (Chijoriga 1997, Basel 1999). Credit risk persist to be a leading source of problems in banks world-wide (Basel, 1999) ''this supports the contention that credit risk is the biggest source of risk to financial institutions’’ (Colquitt, 2007). The studies showed that, weaknesses in credit management have been recognized to be the major cause behind the credit risk in financial institutions. Loan constitute the large portion of credit risk (Kitua, 1996, Basel 1999) .They normally account for 10-15 times the equity of the bank (Kitua, 1996).

According (Summers and Wilson 2000), during the last decade, importance of risk management in credit has increased for both borrowers and lenders, especially, in the developing countries. For this reason, banks and financial institutions started to revise their lending policies).

Useful lessons should be drawn by banks and their supervisors from past experiences. Banks must currently hold a keen awareness of the need to identify, measure, monitor and control credit risk as well as to determine that they hold adequate capital against these risks and that they are adequately compensated for risks incurred (Basel, 1999).

On other hand, credit risk refers to the loss because of the debtor's non-payment of loans or other forms of credit. Credit risks are faced by lenders to consumers, lenders to business, businesses and even individuals. Credit risks, nevertheless, are most encountered in the financial sector particularly by the institutions such as banks. Credit risk management therefore is both a solution and a necessity in the banking setting. The global financial crisis also requires the banks to regain enough confidence by the public not only for the financial institutions but also the financial system in general and to not just rely on the financial aid by the governments and central banks. It is critical for the banks to engage in better credit risk management practices. The Basel Committee on Banking Supervision asserts that loans are the largest and most obvious source of credit risk while others are found on the various activities that the bank involved itself with.

Therefore, it is a requirement for every bank worldwide to be aware of the need to identify measure, monitor and control credit risk while also determining how credit risks could be lowered. This means that a bank should hold adequate capital against these risks and that they are adequately compensated for risks incurred. This is stipulated in Basel II which regulates a bank about how much capital banks need to put aside to guard against the types of financial and operational risks banks face (Basel, 1999).

Credit risk is always treated as the major risk inherent in a bank's banking and trading activities. And if not well managed, this kind of risk may drag a bank into great trouble or even bankruptcy, which can be proved by various bank failure cases. Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transaction. For banks, managing credit risk is not a simple task since comprehensive considerations and practices are needed for identifying, measuring, controlling and minimizing credit risk.

This document studies on credit risk management of the National Microfinance Bank, to understand credit risk management in Tanzania through quantitative and qualitative research. The robustness and weakness of National Microfinance Bank practices in managing credit risk will be identified and areas for improvements will be recommended.

1.3 Statement of the Problem

Privatelisation of public firms, both in Financial and Non financial sectors (due to economic reform in mid 1980s) stimulate business activities with the aim of alleviating poverty. This, in turn widened the market base for credit facilities among financial institutions resulted into the problem to assessing credit risk.

Credit risk is one of the oldest and most important forms of risk faced by banks as financial intermediaries (Broll, Pausch and Welzel 2002). Since this risk carries the potential of wiping out enough of a bank's capital to force it into bankruptcy, managing this kind of risk has always been one of the predominant challenges in running a bank (Broll, Pausch and Welzel, 2002). The goal of credit risk management is to achieve the maximum risk adjusted rate of return by identifying credit risk inherent in individual bank transactions as well as portfolios and controlling the credit risk exposure to an acceptable level. Therefore, this study focuses on the credit risk management of a Tanzanian Banks, and an entire review of the management techniques and practices in use. The study helps NMB and other Tanzanian banks (since they operate in the same environment) to possess a reflection on its own credit risk management framework and its effectiveness.

The study will also address the significance of credit risk management in banking business and analyze the factors which influence the effectiveness of credit risk management in Financial Institution in Tanzania.

This is where concern about this research topic began. The researcher is worried about practices in Tanzania Banks which are always under competitive and profit pressures in the banking industry. Sales and profit targets make them at times ignore what should be carefully done and this poses an extreme risk to the bank's overall performance.

Banks can compete against their multinational competitors by "understanding and embracing sound risk management policies (Audrey, Perryer and Stockport; 2009) and credit risk procedures lie at the core.

Furthermore, this study may have effects on national policy strategies to combat poverty as most of poor people.

1.4 Research Objectives

1.4.1 General Objective

Generally the study aims at assessing the effectiveness of credit risk management in financial institutions.

1.4.2 Specific Objectives

Specific objective of this study are:-

i. To identify credit risk management is incorporated so as to facilitate to operations and monitoring credit risk.

ii. To examine the efficient and effectiveness of internal controls in managing credit risk across the branches.

iii. To identify challenges facing to access credit in the bank

1.5 Research Questions

1.5.1 The Specific Questions

i. What are credit risk management and monitoring credit risk are in place?

ii. What are efficient and effectiveness of internal controls in managing credit risk across the branches?

iii. What are challenges that facing to access credit in the bank?

1.6 Significance of the Study

Credit risk management has attracted a lot of interest in today's business operations because of the great need for financial institutions to minimize losses and maximize opportunity for success, good performance and efficiency of the industry and the economy as whole.

This study has the following theoretical and practical significance:-

i. This study has practical value, which expected to contribute towards improvement of NMB and stability of financial sector.

ii. This study is significant to the financial institutions in either micro or macro–lending. Finally this study findings will equips those dealing with credit management, policy making or those at operating level with appropriate skills, knowledge and tactics of handling credit business. Also enables the practicing firms to minimize all the cases of loan defaulting which enhances the performance of such firms, making them more efficient and effective in credit manner.

iii. The study also helps researchers to identify areas for further study**,** and contributes to the existing body of knowledge.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature on both theoretical and empirical on credit risks management. Also looks at various definitions which enable the study to come up with proper findings and concise conclusions. It further presents what other scholars have found out on the subject matter and the whole concept of credit risk management in the banking industry.

2.2 Definition of Terms

2.2.1 Financial Institutions

Financial Institution is an intermediary that does more than just pool and invest savings (Brealey et al, 2007). Financial institutions act as a linkage between those who have excess fund at a particular time and to those who are short of fund at the same time. These institutions are often described as intermediaries because of their ability to create liquidity that lenders and borrowers want.

This is done by mobilizing funds from surplus units (those whose savings exceed real investment spending) and make those funds available to deficit units (those who wish to spend on consumption and real investment in excess of real incomes).

Through intermediation process lending and borrowing are made cheaper .Without intermediaries, the cost of funds would be higher, and efficient allocation of funds to the best users at the lowest cost would not occur (Block and Hirt, 1997).

2.1.2 Credit Risk

“Credit risk is the potential that a bank borrower or counterparty will fail to meet their obligations in accordance with agreed terms’’ (Basel, 1999). “The change in net asset value due to changes the perceived ability of counterparties to meet their contractual obligations’’ (Pyle, 1997).

“Is an estimate of the probability that a borrower will not repay all or portion of the loan on time’’ (Niu, 2004). Credit risk is the distribution of financial losses due to unexpected changes in the credit quality of counterparty in a financial agreement (Giesecke, 2004).

Credit risk happens when a lender is exposed to loss from a counterparty, borrower or obligor who fails to honour their obligations as they have agreed and contracted (Colquitt, 2007).Credit risk has constantly been a locality of anxiety not only to bankers but also to all in business world because risks of a trading partner not fulfilling his obligations in full one due data can seriously expose the affairs of the other partner (Achou et al, 1998)

2.1.3 Risk Management

Risk management is the process which involves identification, assessment and judgement of risks, assigning ownership taking action to mitigate it or anticipate them, monitoring and reviewing progress (HM Treasury, 2004).

Risk management is the process by which managers satisfy these needs by identifying key risks, obtaining consistent, understandable, operational risk measures, choosing which risks to reduce and which to increase and by what means and establishing procedures to monitor the resulting risk position (Pyle, 1997).

2.1.4 Credit Risk Management

Credit risk management refers to the process of risk assessment that comes in an investment. Risk is regularly comes in investing and in the allocation of capital. The risk must be assessed so as to derive a sound investment decision. Similarly, the assessment of risk of risk is also essential in coming up with the position to balance risk and returns (Miller, 2008).

2.1.5 Risk Mitigation

Risk mitigation is the implementation of measures to deter specific threat to the continuity of the business operations and / or respond to any occurrence or such threats in timely and appropriate manner.

Risk mitigation covers a variety of techniques for loss prevention, loss control and claims management. A risk mitigation agenda can prevent losses and reduces the cost of losses while creating a safer environment for businesses. Banks uses a number of techniques to mitigate the credit risk to which they are exposed. Exposure may be collaterized by first priority claims with cash or securities. A loan exposure may be guaranteed by a third part, or a bank may even purchase credit derivatives to offset various forms of credit risk (Fun Ho et al, 2009).

2.2 Theoretical Literature Review

There is a substantial literature on models explaining the behavior of banking firms using neoclassical microeconomic theory. Early work by Klein represents a corner stone in the theory of the banking firm, and was followed by Monti, Baltensperger, Santomero, and Dermine 2002. These models assume that the bank is operated to maximize expected profit, and incorporates the role of a bank as a financial intermediary that performs both a brokerage and a risk transformation function. As such, the bank is viewed as a firm accepting and managing risks to earn profit.

Adopting the assumption of a profit maximizing banking firm, one can define banking risks as the adverse impact on profitability of several distinct sources of uncertainty (Bessis,2000). The major role of banking in an economy is to bring together borrowers and lenders of funds. Since the bank is subject to credit and market risks on the funds it lends and to withdrawal risk on the funds it borrows, it must contend with risk associated with both its assets and its liabilities (O'Hara, 2001). In fact, banks face numerous risks affecting profitability throughout its business line. The management of these risks has always been a major component of bank management. Banks can also be defined as firms balancing risk/return characteristics of alternative opportunities with the goal of maximizing profit. By offering depositors financial instruments with desirable risk/return characteristics, banks encourage savings. By discriminating credit requests, banks channel funds into socially productive and profitable uses (Fraser, Gup and Kolari, 2000).

2.2.1 Banking Risks

The major sources of banking risks are classified into four categories: (1) credit risk, (2) market risk, (3) operational risk and (4) performance risk. Credit risk is the change in asset value due to changes in the perceived ability of counterparties to meet their contractual obligation. Market risk is the change in asset value due to changes in underlying economic factors such as interest rates, exchange rates, and equity and commodity prices. Operational risk comes from costs incurred through mistakes made in carrying out transactions such as settlement failures, failures to meet regulatory requirements, and untimely collections. Performance risk encompasses losses resulting from the failure to properly monitor employees or to use appropriate methods (Pyle, 1997).

The classification of banking risks, however, differs by a researcher or a supervisory agency. The Basel Committee (1997) lists the key risks faced by banks as credit risk, country and transfer risk, market risk, interest rate risk, liquidity risk, operational risk, legal risk, and reputation risk. A number of scholars have defined nine categories of risk for bank supervision purposes. These risks are: credit, interest rate, liquidity, price, foreign currency translation, transaction, compliance, strategic, and reputation. Bessis summarizes the financial risks faced by banks as credit risk, interest risk market risk, liquidity risk, operational risk, foreign exchange risk, and other risk.

Credit risk, which is the focus of this research, is defined by the Basel Committee (2000) as "*the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms*." It is usually associated with loans and securities, which by generating interest income, are the primary source of bank revenue. Credit risk is the largest risk faced by commercial banks in Tanzania. Loans are the major and most obvious source of credit risk to banks.

However, other sources of credit risk exist throughout the activities of a bank, including in the banking book, the trading book, and both on and off the balance sheet. Banks are increasingly facing credit risk (or counterparty risk) in various financial instruments other than loans, including acceptances, inter-bank transactions, trade financing, foreign exchange transactions, financial futures, swaps, bonds, equities, options, in the extension of commitments and guarantees and in the settlement of transactions (The Basel Committee, 2000).

Credit risk is the possibility that the actual return on an investment or loan extended will deviate from that, which was expected (Conford, 2000). Coyle (2000) defines credit risk as losses from the refusal or inability of credit customers to pay what is owed in full and on time. The main sources of credit risk include, limited institutional capacity , inappropriate credit policies, volatile interest rates, poor management, inappropriate laws, low capital and liquidity levels, directed lending, massive licensing of banks, poor loan underwritingg, reckless lending, poor credit assessment., no non-executive directors, poor loan underwriting, laxity in credit assessment, poor lending practices, government interference and inadequate supervision by the central bank. To minimize these risks, it is necessary for the financial system to have; well-capitalized banks, service to a wide range of customers, sharing of information about borrowers, stabilization of interest rates, reduction in non-performing loans, increased bank deposits and increased credit extended to borrowers. Loan defaults and non-performing loans need to be reduced (Bank Supervision Annual Report, 2006; Laker, 2007; Sandstorm, 2009).

2.2.2 Credit Risk Management

The key principles in credit risk management are; firstly , establishment of a clear structure, allocation of responsibility and accountability, processes have to be prioritized and disciplined, responsibilities should be clearly communicated and accountability assigned thereto (Linder gren,1987). According to the Demirguc-Khunt and Huzinga (1999), the overwhelming concern on bank credit risk management is two-fold. First, the Newtonian reaction against bank losses, a realization that after the losses have occurred that the losses are unbearable.

Secondly, recent development in the field of financing commercial paper, securitization, and other non-bank competition have pushed banks to find viable loan borrowers. This has seen large and stable companies shifting to open market sources of finance like bond market. Organizing and managing the lending function in a highly professional manner and doing so pro-actively can minimize whatever the degree of risk assumed losses. Banks can tap increasingly sophisticated measuring techniques in approaching risk management issues (Gill, 1989).

Technological developments, particularly the increasing availability of low cost computing power and communications, have played an important supporting role in facilitating the adoption of more rigorous credit risk management techniques. Implementation of some of these new approaches still has a long way to go for the bulk of banks. The likely acceleration of change in credit risk management in banks is viewed as an inevitable response to an environment where competition in the provision of financial services is increasing and, thus, need for banks and financial institutions to identify new and profitable business opportunities and properly measure the associated risks, is growing (Lardy, 1998; Roels et. al. 1990).

Inevitably, as banks improve their ability to assess risk and return associated with their various activities, the nature and relative sizes of the implicit internal subsidies will become more transparent. Brown and Manassee (2004) observe that credit risk arose before financing of business ventures. The bible is hostile to credit by stating that one should not let the sun go down on an unpaid wage. Banks and other intermediaries can transfer the payment delays and the credit risk among producers, or between producers and outside investors (Demirguc-kunt and Huzinga, 2000).

While the commercial banks have faced difficulties over the years for a multitude of reasons, the major cause of serious financial problems continues to be directly related to credit standards for borrowers, poor portfolio risk management or lack of attention to changes in the economic circumstances and competitive climate (Central Bank Annual Supervision Report, 2000). The credit decision should be based on a thorough evaluation of the risk conditions of the lending and the characteristics of the borrower.

Numerous approaches have been developed for incorporating risk into decision-making process by lending organizations. They range from relatively simple methods, such as the use of subjective or informal approaches, to fairly complex ones such as the use of computerized simulation models (Montes-Negret, 1998; BOT Annual Supervision Report, 2000).

According to Saunders (1996), banks need to gather adequate information about potential customers to be able to calibrate the credit risk exposure. The information gathered will guide the bank in assessing the probability of borrower default and price the loan accordingly. Much of this information is gathered during loan documentation. The bank should however go beyond information provided by the borrower and seek additional information from third parties like credit rating agencies and credit reference bureaus (Simson and Hempel, 1999).

Credit extended to borrowers may be at the risk of default such that whereas banks extend credit on the understanding that borrowers will repay their loans, some borrowers usually default and as a result, banks income decrease due to the need to provision for the loans. Where commercial banks do not have an indication of what proportion of their borrowers will default, earnings will vary thus exposing the banks to an additional risk of variability of their profits. Every financial institution bears a degree of risk when the institution lends to business and consumers and hence experiences some loan losses when certain borrowers fail to repay their loans as agreed. Principally, the credit risk of a bank is the possibility of loss arising from non-repayment of interest and the principle, or both, or non-realization of securities on the loans.

2.2.3 Other Theories with Implication on Credit Risk Management

Several theories have been put forward which have implications on credit risk management. Interest rates theories recognize that interest rates have an effect on credit risk because the higher the interest rate the higher the risk that the loan might not be repaid and thus the higher the credit risk. The term structure of interest rate theories contends that the longterm interest rates are more risky than short term interest rates, thus investors expect a higher return if they have to be motivated to hold instruments that are longterm interest bearing instrument. Theories of financial crises contend that a crisis in the financial sector affects the ability of commercial banks to extend credit as well as the ability of the borrowers to service their loans. Portfolio theory in the banking sector is applied in constitution of loan portfolios of banks where there are guidelines on loans that banks should extend to their clients, such as limit in terms of credit that should be extended to third parties. The agency theory contends that many banks are managed by the managers and not by the owners. Banks that are managed by professional managers are expected to better analyze and monitor credit awarded to their clients. Commercial banks should be properly managed and management should be “fit and proper” to be able to make decisions on credit risk management and that which should steer banks to high levels of profitability.

Commercial banks are the foundation of the payment system in many economies by playing an intermediary role between savers and borrowers. They further enhance the financial system by ensuring that financial institutions are stable and are able to effectively facilitate financial transactions. The main challenges to commercial banks in their operations are the disbursement of loans and advances.

There is need for commercial banks to adopt appropriate credit appraisal techniques to minimize the possibility of loan defaults since defaults on loan repayments leads to adverse effects such as the depositors losing their money, lose of confidence in the banking system, and financial instability (Coyle, 2000).

In Tanzania, commercial banks play an important role in mobilizing financial resources for investment by extending credit to various businesses and investors. Lending represents the heart of the banking industry and loans are the dominant assets as they generate the largest share of operating income. Loans however expose the banks to the greatest level of risk.

2.2.4 Principles for the Assessment of Banks’ Management of Credit Risk

According to (Basel, 1999) the following are the principle for assessment of banks’ management of credit risk.

(i) Establishing an Appropriate Credit Risk Environment

Principle 1: The board of directors should have responsibility for approving and periodically reviewing the credit risk strategy and significant credit risk policies of the bank. The strategy should reflect the bank's tolerance for risk and the level of profitability the bank expects to achieve for incurring various credit risks.

Principle 2: Senior management should have responsibility for implementing the credit risk strategy approved by the board of directors and for developing policies and procedures for identifying, measuring, monitoring and controlling credit risk. Such policies and procedures should address credit risk in all of the bank's activities and at both the individual credit and portfolio levels.

Principle 3: Banks should identify and manage credit risk inherent in all products and activities. Banks should ensure that the risks of products and activities new to them are subject to adequate procedures and controls before being introduced or undertaken, and approved in advance by the board of directors or its appropriate committee.

(ii) Operating Under A Sound Credit Granting Process

Principle 4: Banks must operate under sound, well-defined credit-granting criteria.

These criteria should include a thorough understanding of the borrower or counterparty, as well as the purpose and structure of the credit, and its source of repayment.

Principle 5: Banks should establish overall credit limits at the level of individual.

Borrower's and counterparties, and groups of connected counterparties that aggregate in a comparable and meaningful manner different types of exposures, both in the banking and trading book and on and off the balance sheet.

Principle 6: Banks should have a clearly-established process in place for approving new credits as well as the extension of existing credits**.**

Principle 7: All extensions of credit must be made on an arm's-length basis. In particular, credits to related companies and individuals must be monitored with particular care and other appropriate steps taken to control or mitigate the risks of connected lending.

(iii) Maintaining an Appropriate Credit Administration, Measurement And Monitoring Process

Principle 8: Banks should have in place a system for the ongoing administration of their various credit risk-bearing portfolios.

Principle 9: Banks must have in place a system for monitoring the condition of individual credits, including determining the adequacy of provisions and reserves.

Principle 10: Banks should develop and utilise internal risk rating systems in managing credit risk. The rating system should be consistent with the nature, size and complexity of a bank's activities.

Principle 11: Banks must have information systems and analytical techniques that enable management to measure the credit risk inherent in all on- and off-balance sheet activities. The management information system should provide adequate information on the composition of the credit portfolio, including identification of any concentrations of risk.

Principle 12: Banks must have in place a system for monitoring the overall composition and quality of the credit portfolio.

Principle 13: Banks should take into consideration potential future changes in economic conditions when assessing individual credits and their credit portfolios, and should assess their credit risk exposures under stressful conditions.

(iv) Ensuring Adequate Controls over Credit Risk

Principle 14: Banks should establish a system of independent, ongoing credit review and the results of such reviews should be communicated directly to the board of directors and senior management.

Principle 15: Banks must ensure that the credit-granting function is being properly managed and that credit exposures are within levels consistent with prudential standards and internal limits. Banks should establish and enforce internal controls and other practices to ensure that exceptions to policies, procedures and limits are reported in a timely manner to the appropriate level of management.

Principle 16: Banks must have a system in place for managing problem credits and various other workout situations.

(v) The Role of Supervisors

Principle 17: Supervisors should require that banks have an effective system in place to identify measure, monitor and control credit risk as part of an overall approach to risk management.

Supervisors should conduct an independent evaluation of a bank’s strategies, policies, practices and procedures related to the granting of credit and the ongoing management of the portfolio. Supervisors should consider setting prudential limits to restrict bank exposures to single borrowers or groups of connected counterparties.

2.2.5 Role of Financial Institutions in the Economic Growth

Commercial banks are the foundation of the payment system in many economies by playing an intermediary role between savers and borrowers. They further enhance the financial system by ensuring that financial institutions are stable and are able to effectively facilitate financial transactions. The main challenges to commercial banks in their operations are the disbursement of loans and advances. There is need for commercial banks to adopt appropriate credit appraisal techniques to minimize the possibility of loan defaults since defaults on loan repayments leads to adverse effects such as the depositors losing their money , lose of confidence in the banking system, and financial instability (Coyle, 2000).

Risks exposed to commercial banks create a threat of a crisis not only in the banking industry but to the financial market as a whole and credit risk is one of the threats to soundness of commercial banks. To minimize credit risks, banks are encouraged to use the “know your customer” principle as expounded by the Basel Committee on Banking Supervision. (Kunt-Demir guc and Detragiache, 1997; Parry, 1999; Kane and Rice, 1998).

Subjective decision-making by the management of banks may lead to extending credit to business enterprises they own or with which they are affiliated, to personal friends, to persons with a reputation for non-financial acumen or to meet a personal agenda, such as cultivating special relationship with celebrities or well connected individuals. A solution to this may be the use of tested lending techniques and especially quantitative ones, which filter out subjectivity (Griffith and Persuad, 2002).

2.3 Empirical Literature Review

In 2002 a comprehensive study was conducted by Edward I. Altman named as "Managing Credit Risk: A Challenge for the New Millennium". The research emphasized the importance of credit-risk management in the present era. The high default rates and bankruptcies are now more important factors in credit risk management. The interest rate was very high in that scenario. In 1999 banks, regulators and financial market practitioners were considering the credit risk management inevitable because of various reasons: The sophisticated risk management techniques in a regulatory environment were needed to be emphasized. The refinements in credit-scoring techniques were required. The establishment of databases on defaults, recoveries and credit migrations were immensely desired. Credit risk mitigation techniques such as securitizations, credit derivatives and credit insurance products were to be developed. Portfolio management techniques for credit assets should be established.

In the study done by Richard and Chijoriga et al (2004) from UDSM and Hakan and Bohman et al (2004) from School of Business Sweden on Credit risk management system of commercial bank in Tanzania The paper was developed to present a conceptual model for understanding credit risk management system of commercial banks in an economy with less developed financial sector. According to the paper by Chijoriga (2005) which exists on this topic is particularly focused on developed economies.

So it aimed to develop a model which fitted Tanzania's environment. The primary and secondary information was gathered from commercial banks through various relevant documents and interview of the key management officials dealing with credit risk management. The commercial bank selected was operating nationally and internationally and was very active in lending for a long time. It focused on the key findings that the components of Credit Risk Management system in less developed economies slightly differs from developed economies. The environment in which the bank operates is to be considered as one of the key factors in successful Credit Risk Management system. Tanzania is the best example for of the economy having less developed financial sector for Credit Risk Management so the commercial banks operating in Tanzania were taken as a case study.

Recently in 2009 a study from Turkey on "Credit Risk Market and the Recent Loan Profile in the Turkish Banking Sector" was anticipated by Erk Hacihasanoglu and Ozlem Ozdemir. The research on financial stability implications of credit risk transfer markets is very rare. The work, considering the interactions between the various credit risk transfer markets or instruments, is insufficient. There is a small number of existing studies on credit risk derivatives which lacks quantitative data also a brief history of markets is available. The paper tells us the development of credit risk transfer instruments and its contribution in financial stability of emerging economy. The research was designed on the basis of history and available quantitative data to analyze credit risk environment and recent developments of Turkish Banking system. It suggests the a well functioning credit derivatives market provide basis for diversified financial system to support a fruitful recovery in Turkish economy.

In the study done by Philippe Jorion (2009) of USA on "Risk management Lessons from the Credit Crisis". The paper shows that the perfect carrying out of risk management does not assure you that the huge losses will not occur. Probability of loses always exists even if all the precautionary measures are taken. There are certain factors involved in huge loses usually, business decisions and bad luck. The events of 2007 and 2008 have tinted the discrepancies of risk models. Risk models failed for some firms for know unknowns like model risk, liquidity risk and counterparty risk.

In 2008 the failure of risk models was because of unknown unknowns such as regulatory and structural changes in capital markets. Scenario analysis and stress tests should be emphasized and the improvement in the risk management system should be made. It can only be possible by position-based-risk measures serves as the basis of modern risk management architecture. The credit crisis emphasized the importance of risk management.

2.3.1 Aim of Credit Risk Management

The aim of credit risk management is to maximize a bank's risk adjusted rate of return by maintaining credit risk exposure within acceptable boundary. Banks need to manage the credit risk inherent in the entire loan portfolio as well as the risk in individual credit or transactions (Fun Ho et al, 2009). A sound credit risk management allows stakeholders to have increased confidence in the organization corporate governance and ability to deliver in wider environment in which it functions. The maximization of shareholders wealth is the primary purpose of bank management, as with other firms, despite the risky nature of banking business (Koch, 1995).

Bank managers must therefore manage and mitigate the credit risk that arise from the loan products as failure to do so will lead to loan default which in turn may cause bank failure. When the bank lends money out, should embark on monitoring, follow-up and supervision, and this should be on continuous basis. This, if done properly, can reduce the risk of not getting repaid by checking up on how the money has been used and what the customer is doing about repayment (Suneja 1992). The effective credit risk management system should insure that there is risk control strategy, collections tactics from borrowers, and risk mitigation tools that are implemented to support the overall portfolio risk reduction (Niu, 2004). It involves the establishment of an appropriate credit risk environment, operating under a sound credit granting process, maintaining an appropriate credit administration that involves monitoring process, as well as adequate control over credit risk (Basel, 1999; IAIS, 2003). Bank should monitor the credit exposures to detect such change in time (Christl et al, 2004).

2.3.2 The Impact of Loan Default in Financial Institutions

The losses caused by loan default have been the issue of many banks in both developed and non developed countries .However in developing courtiers is at acute. In developing countries the persistent loan defaults has become an order of the day. Most of banks in the developing country have experienced persistence on loan default. This is evidence by the under-capitalization and illiquidity of 160 DFIs in 33 developing countries (Hoque, 2004; World Bank 1993 and Calomiris and Himmelberg, 1993).

Loan default is said to have occurred when borrowers cannot or will not repay their loan and financial institutions will no longer expect to receive payment. Theoretical, loan defaults occur when borrowers are not willing and able to pay (Hoque, 2004). The risk of losses that result in the default of payment of the debtors is a kind of risk that must be expected (Miller, 2008). Holme and Mosley (1996) argues that it is the default rate that most greatly affects the financial viability condition such that effective screening and loan enforcement mechanism are essential for success.

Chijoriga (2000), report that there is a significant inverse correlation between the level of administrative costs and default rate. This implies that financial institutions will not keep the default rate at minimum, unless they incur high costs on loan screening and enforcement.

2.3.3 Asset-by-Asset Approach on Credit Risk Management

Traditionally banks have taken asset-by-asset approach to credit risk management. However different banks exhibit different methods thus each bank methods varies, in general this approach involves periodically evaluating the credit quality of loans and other credit exposures, applying a credit risk rating, and aggregating the results of this analysis to identify a portfolio's expected losses (Lore, M., and Borodovsky, L., 2002). The foundation of asset by asset approach is a sound loan review and internal credit rating system. A loan review and credit rating system enable management to identify changes in individual credits, or portfolio trends in a timely manner. Based on the results of its problem loan identification, loan review, and credit risk rating system management can make necessary modifications to portfolio strategies or increase the supervision of credits in a timely manner.

2.3.4 Credit Evaluation and Scoring

To assess the creditworthiness of the counterparties traditionally banks have been using a number of methods such as credit scoring, rating and credit committees. However according to (Brant, 1999; Chijorika, 1997) the appraisal of borrowers creditworthiness carried out by the use of qualitative technique its main challenge is that it has their subjectivity nature. But still the borrowers features assessed through qualitative model can be assigned numbers with the sum of the values compare to a threshold.

Many scholars have been discussing on credit evaluation and scoring. According to (Ross et al, 1996) there are no magic formulas for evaluating the likelihood of default by the customer. In general terms, the classic five Cs of credit are the basic factors to be evaluated: This includes character, capacity, capital, collateral and conditions.

This has been explained below as follows:

i. Character: The customer's obedience to meet credit obligations.

ii. Capacity: Customer ability to meet credit obligations out of operating cash flows.

iii. Capital: The customers financial reserves

iv. Collateral: Assets pledged by the customer for security in case of default.

v. Conditions: General economic conditions in the customer's line of business

2.3.5 Credit Rating

Credit rating systems have appeared to play a crucial role in managing credit risk. The meaningful of credit rating system signify changes in expected level of loans loss (Santorome, 1997; Chijoriga 1997) accomplished that quantitative models make it potential to amongst others, numerically establish which factors are significant in explaining default risk, be more able to screen out bad loan applicants and be in a better position to calculate any reserve needed to meet expected future loan losses.

2.3.6 Valuation of Collateral

Collateral is demanded in most lending concerned as a measure of credit risk. Collateral can take many different forms, but generally the more liquid the collateral and robust the valuation, the greater the effect on regulatory capital. There are different ways to calculate the effects, depending upon the type of asset taken as collateral. Knowing the important of collateral on lending business in case of the default by customer the exercise of the collateral valuation should be carried very careful. The valuation of collateral presented by the applicant is essential element in the approval process thus on assessment customer creditworthiness and general has an impact on the overall assessment of the credit risk involved in a possible exposure. The exercise of valuing the customer's collateral is done by a professional valuer. According to (Rouse, 1989), most professional property valuations are based on an open market value at the time of valuation which assumes a willing buyer and seller and reasonable period for the sale to be negotiated taking into account the nature of the property and the state of the market. However, there is a problem associated with valuations, since some assets pledged as collateral are difficult to value because of their specialized nature or location and others might require a detailed internal inspection.

The major attribute of a collateralized credit is not only the borrower's person credit standing, which determines mostly the probability of default but the collateral which lender can realize in case the customer defaults and thus determines the bank loss. If the borrower defaults in making payment on the specification, the banker may realize the collaterals pledged with him to recover dues from sale proceeds thereof. Realization is simply the process of converting the collateral into money to pay for the debt.The value of collateral is included in calculating the capital requirement under Basel II this allow passing the risk component of loss given default and other requirements concerning credit risk mitigation techniques. So as to calculate the risk parameters under Basel II correctly, it is essential for the collateral to be affected completely independently of the calculation of the borrower's probability of default in credit rating process. Bank should ensure that the probability of default and loss given default are shown separately in order to meet the Basel requirement of splitting up the review into a customer rating which reveal only the probability of default on the one hand and the transaction valuation which also contain a valuation of collateral to support the credit decision on the other hand.

2.3.7 Useful Tool for Managing Credit Risk

Credit derivatives are the useful tools for managing credit risk. Financial Institutions also mitigate risk through credit derivatives that are aimed at transferring the risk to a third party Credit derivatives are more flexible at transferring risk this instrument makes it easier for banks to circumvent the ''lemons'' problem caused by banks superior information about the credit quality of their asymmetric information on loan (Duffee et al, 1997) as a result of a very fast process of financial innovation which include the use of credit derivatives bank have been able to originate new loans and sell them on the market there by obtaining addition liquidity and relaxing capital requirement constraints (Altunbas et al, 2009).

However though credit derivatives have been widely used but the fact that some loans are sold can't eliminate credit risk at all, as the buyer of the derivative can also fail to pay. Thus credit derivative instruments can't fully remove credit

2.3.8 Risk Assessment

Andrew Hawkins(1995)points out that every face of risk from external and internal sources needs to be assessed. A precondition to risk assessment is establishment of objectives linked at different levels and internally consistent. He further defined risk assessment as identification and analysis of relevant risk to manage. Once risk has been identified an assessment of possible impact and corresponding likelihood of occurrence have to be done. In the planning stage management should agree on the most appropriate definition and number of categories to be used when assessing both likelihood impacts.

2.3.9 Risk Measurement

Once the resource of risk have been identified and assessed financial institutions must begin to measure the risk. As the foregoing list of risks indicates that, risk management process can be quite a challenge. According to financial theory standard deviation is used as good proxy measure of risk and covariance of analysis is more defined measure of risk. Many none market risk face by estimated through various modeling techniques.

2.3.10 Monitoring Risk

This part of the operational credit risk management process entails a comparison of the actual risk level with the levels permissible under the bank’s credit risk management guidelines. Thus the bank’s level would be continually monitored to ensure that it remains within acceptable range. In addition to market risks, the bank will monitor other risk limits to ensure that their levels are consistent with provides immediate feedback to management when actual levels depart from acceptable risk level.

2.3.11 Controlling Risk

Control activities are the policies and procedures that help to ensure management directives are carried out (Andrew Hawkins,1995).They help to ensure that necessary actions are taken to address risk to the achievement of the bank's objectives .Andrew Hawkins further asserts that control activities should occur

2.3.12 Operational Credit Risk Management Process

PWC (2001) point out that operational risk management process set out the overall procedures for operational credit risk management.

- Controls-definition of internal controls or section of selection of alternate mitigation strategy such as insurance for identified credit risk.
- Assessment programs ensure that controls and policies are being followed and determine level of severity. These may include process flows, self assessment programs and audit programs.
- Measurement-A combination of financial and non financial measure credit risk indicators escalation triggers and economic capital to determine current risk levels and progress towards goals.
- Reporting-Information for management to increase awareness and prioritize resource.

Carefully monitoring of the bank's will provide management with red flags wherever the levels are beyond those permitted as specified in the operation risk management guidelines. In these instances, corrective measures should be undertaken the entire operational risk management system will depend on the strength of its reporting system and internal control process.

2.4 Conceptual Framework

Conceptual frame work developed on the theories and empirical reviews ;Loans that constitutes a large proportion of the assets in most banks portfolios are relative ly liquid and exhibit the highest credit risk(Koch and MacDonald,2000)the theory of asymmetric information argues that it may be impossible to distinguish good borrowers from bad borrowers which may result in adverse selection and moral hazards problems. Adverse selection and moral hazards have led to substantial accumulation of non performing accounts in Banks. The following are the hints to be considered in the study of Assessing effectiveness of Credit Risk Management in Financial Institution:-

2.4.1 Sufficient Credit Procedures and Policies

The bank board of directors and senior management should ensure that the banks have appropriate credit risk assessment process and effective internal control to consistently determine provisions for loans losses in accordance with he bank policies and procedure' (BIS, 2005).

The efficient management of credit system is a vital important part of the overall risk management system and is crucial to each bank bottom line and eventually the survival and growth of banking organization.

In order to reduce numbers of defaulter on loan repayment due to the result of asymmetric information, adverse selection and moral hazards the effective management system should be in place (Basel, 1999, IAIS, 2003).

Banks usually provide loans primarily upon the borrower's ability to produce adequate cash flows from operations to satisfy the terms of accord. This is because the loan decision rests more upon the value of the firm as a going concern basis thus the loan is most likely to be paid from company's earnings than from the liquidation of the firm's assets and working capital (Thygerson 1995).

2.4.2 Customer Evaluation

Obviously the bank will need to know whether the customer is eligible to getting a credit or not by measuring the value of the collateral (Davies and Kearns, 1994). Even if the bank uses other criteria for lending they expect some level of financial forecasting and thorough market analysis to enable some sort of market prediction to be made (Konyimbih1996).

The above implies that, before granting credit to the customer the bank has to analyze both the attributes of the borrower and to see whether there is compatibility between the two to enable the repayment of the loan when it is due (Basel, 1999). Evaluation of borrowers to see whether they qualify for the loan as cited before is critical in credit management because this is what tells the lender of the likelihood of getting the money back.

2.4.3 Adequate Controls over Credit

Banks should establish a system of independent, ongoing credit review, control and the results of such reviews should be communicated directly to the board of directors and senior management.

Banks must ensure that the credit-granting function is being properly managed and that credit exposures are within levels consistent with prudential standards and internal limits. Banks should establish and enforce internal controls and other practices to ensure that exceptions to policies, procedures and limits are reported in a timely manner to the appropriate level of management.

Banks must have a system in place for managing problem credits and various other workout situations.

2.4.4 Monitoring Borrowers

It involves the establishment of an appropriate credit risk environment, operating under a sound credit granting process, maintaining an appropriate credit administration that involves monitoring process, as well as adequate control over credit risk (Basel, 1999; IAIS, 2003). Bank should monitor the credit exposures to detect such change in time (Christl et al, 2004) .

2.4.5 Staff Training in Credit Risk Management

Banks staff should be given training on Credit Risk Management in order to manage credit risk in Financial Institutions especially NMB Bank.

2.5 Models used

Reduced Form Model or approach or Intensity based approach is introduced byArtzner & Delbaen (1995), Jarrow & Turnbull (1995) and Duffie & Singleton (1999).

In this approach, the default event is modeled as either a stopped position process or a stopped cox process with intensity **h.** The Intensity **h** is called hazard rate in reduce form approach, since the product of h and an infinitesimal time period dt given the firm has not default yet before time t. It was showed in Lando (1998) and Duffie & Singleton (1999) that the default able bond can be calculated as if they were default free using an interest rate that is risk free rate adjusted by the intensity.

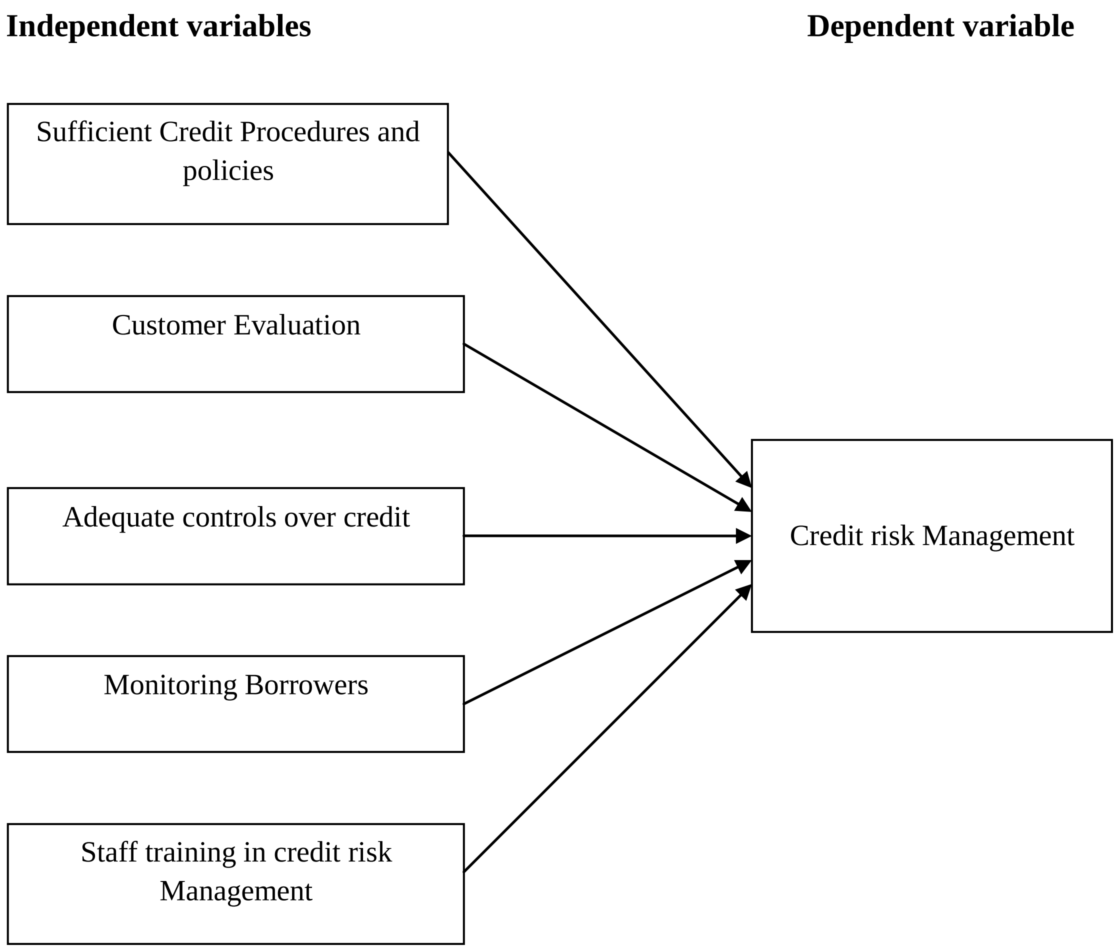


Figure 1.1: Conceptual Frame Work for Credit Risk Management

In complete information model or approach is developed by (Duffer & Lando, 2001), Giesecke 2001) (Cetin. Jarrow, Potter & Yildirim, 2002) which is a combination of structural approach and intensity based approach. In this approach, the default event is directly modelled as a point process **Nt** with one ng jump as size of one at default.

This point process **Nt** is a positive sub martingale and could be decomposed into a martingale plus its compensator **At** by Doob Meyer decomposition theorem. In reduced from approach the compensator At of default process can be represented as a definite integration of the hazard rate **ht**. Incomplete information approach generalized the forms of the compensator At which may not be represented as an integration of the hazard rate **ht**. People turn to model the compensator **At** directly from the definition of default instead of modeling **ht**.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Introduction

Research Methodology is a philosophical framework for any research (White, 2003). It contains the data used and data collection techniques.

For the purpose of this study, both primary data and secondary data were used. This chapter sets the arrangement for collection and analysis of data. This is the blueprint of the research project. The study is descriptive in nature and the main objective of the methodology is to set roadmap for collection of primary and secondary data.

3.2 Research Design

The study explores the problem in an interpretative view, using a descriptive approach which uses observation and surveys. To illustrate the descriptive type of research, Creswell (1994) guided the researcher when he stated: descriptive method of research is to gather information about the present existing condition. The purpose of employing this method is to describe the nature of a situation, as it exists at the time of the study and to explore the causes of particular phenomena. I collected data from the 30 respondents so as to formulate rational, sound conclusions and recommendations for the study.

3.3 Sampling Technique

At the time of the study, NMB had more than ten branches operating in Dar es Salaam. Due to time and financial constraints, the study dealt with only five branches which was selected randomly.

3.4 Data Collection and Source

Both secondary and primary data were collected

3.4.1 Primary Data

Primary data were collected using structured questionnaire that randomly selected 25 respondents from each five sample branches which are NMB house, Bank house, Ilala branch, Temeke branch and Mwenge branch. Finally made of 125 respondents who are administered.

3.4.2 Secondary Data

Secondary data obtained from report from NMB bank managers, loan officers, previous research reports, web-site and then useful information obtained from primary data.

3.5 Data Analysis

Data analysis refers to estimation of unknown parameters of the population and hypotheses testing for drawing inferences. (Kothari, 2004). Analysis can be categorized into two, as descriptive analysis and inferential analysis.

Descriptive analysis is largely the study of distribution of one variable while inferential analysis is concerned with various tests of significance for hypotheses testing in order to determine validity that can be said to indicate some conclusion. (Kothari, 2004). In this study the collected data were analyzed with the help of Software Package for Statistical Science (SPSS).

3.6 Sample Size

NMB has more than 13 branches operating in Dar es salaam. After considering the time constraint and the positive attributes, random sampling was chosen to create a sample selection. Five NMB branches were selected randomly and each branched 25 respondents were selected randomly to participate in the study. Selected branches are NMB House, Bank House, Mwenge Branch, Ilala Branch and Temeke Branch.

3.7 Validity

This is the degree to which a study accurately reflect or assesses the specific concept that the researcher is attempting to measure .Validity is concerned with the study's success at measuring what the researchers set out to measure variables. In this study, data were collected through questionnaire, where by Researcher tested the questionnaire to ensure that data collected and gathered were the right kind of data for the study in accordance to the research objectives..

3.8 Ethics

The ethic is the rule of conduct recognized in respect to a particular class of human actions or a particular group. Its methodology must match its subject matter. It is unethical to be biased while collecting data during research process. During the process of data collection at least all respondents from NMB branches showed that they adhere on confidentiality. This showed when a Researcher need some official documents, only Authorized Officers are responsible for it. So by doing this, Banks adhere confidentiality.

CHAPTER FOUR

4.0 RESEARCH FINDINGS, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter deals with information collected from NMB Branches or research area, also explain how many staff responded to the questioners been distributed, data evaluation and summary of the findings.

Table 4.0 : The results of Branches Responded to the Questions. Response from Q.1

Branch	**No.of Questionnaires Distributed**	**No.of Respondents**	**Percentage of Respondents**
NMB House	10	25	20%
Bank House	10	25	20%
Mwenge Branch	10	25	20%
Ilala Branch	10	25	20%
Temeke Branch	10	25	20%
Total	**50**	**125**	**100%**

Source: Data Collection

The table 4.1 shows that at least all branches have staff reach to University level and all branches do not have the staff that has PhD qualification.

4.3 Data Collection and Evaluation

Table 4.1 : Level of Education to Staff of NMB Branches Credit Section-Response from Q.4

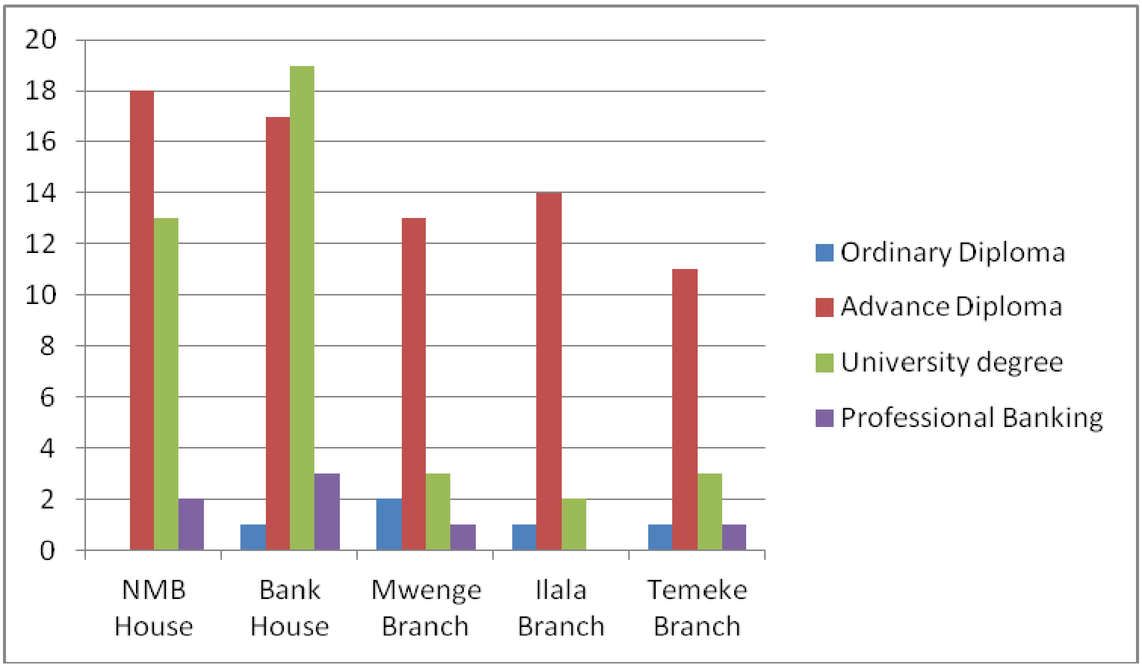
Name of Branch	**Ordinary Diploma**	**Advance Diploma**	**University degree**	**PhD**	**Professional Banking**
NMB House	-	18	13	-	2
Bank House	1	17	19	-	3
Mwenge Branch	2	13	3	-	1
Ilala Branch	1	14	2	-	-
Temeke Branch	1	11	3	-	1
Total	**5**	**73**	**40**	**-**	**7**

Source: Data Collection

The analysis showed that at least the all staff from five branches have good level of education, which indicate that there is improvement in credit risk management.

The analysis shows that the branches with higher percentage of staff deal with credit risk management. According to graph shows NMB Branch has high percentage (25%)of the staff deals with credit risk management, second is Temeke Branch have 20% and the lowest in percentage is Mwenge Branch which have 0%. This means that Mwenge Branch do not have staff who deal with risk management, they just use staff from Headquarter to monitor the risk occurred to the branch monthly.

The analysis shows that the branches with higher percentage of staff deal with credit risk management. According to graph shows NMB Branch has high percentage (25%) of the staff deals with credit risk management, second is Temeke Branch have 20% and the lowest in percentage is Mwenge Branch which have 0%. This means that Mwenge Branch do not have staff who deal with risk management, they just use staff from Headquarter to monitor the risk occurred to the branch monthly.



Source: Data Collection

Figure 4.1 : Level of Education to Staff of NMB Branches Credit Section-Response from Q.4

This analysis showed that NMB House have greater number of staff dealing with credit risk compared to other Branches. This means that NMB House have greater chance of managing credit risk compared to other branches due to its greater number of staff.

Therefore in order to manage risk, Bank should have staff responsible for credit risk management.

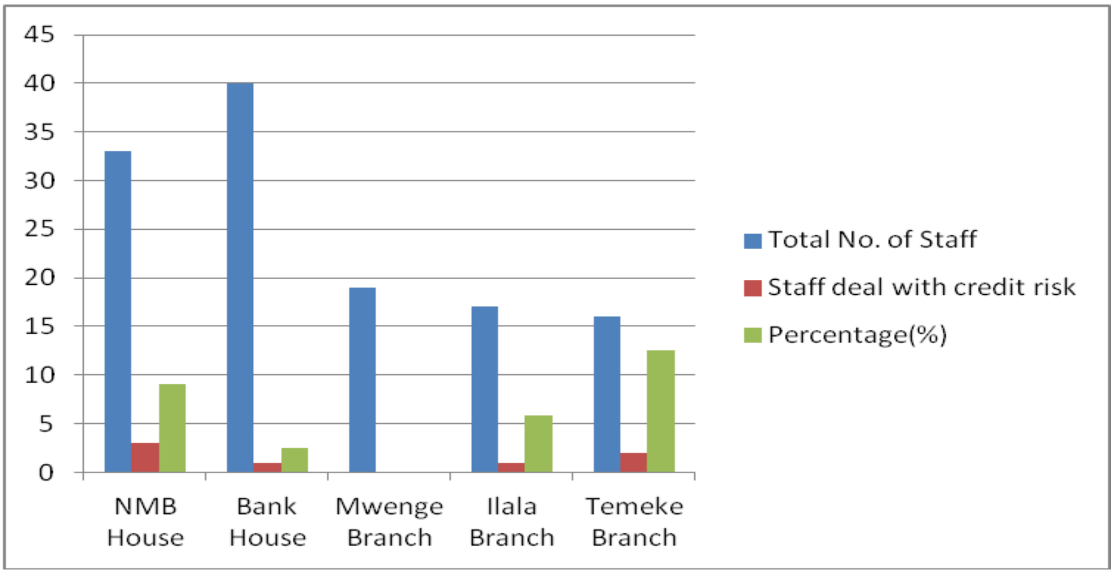
Table 4.2: The number of NMB Credit Section Staff. Response from Q.6

Name of Branch	Total No. of Staff	Staff deal with credit risk	Percentage(%)
NMB House	33	3	25
Bank House	40	1	10
Mwenge Branch	19	-	0
Ilala Branch	17	1	14
Temeke Branch	16	2	20

Source: Data Collection

4.2 Empirical Findings and Discussion

The first critical element of the study revealed that the NMB relies on the well prepared staff in credit risk management department. The staff are well experience and competent in the area of credit risk management. NMB prefer staff with a minimum qualification of first degree or equivalent, highly experienced, good skill, knowledgeable and well committed to their work. As stipulated in the micro credit policy, the bank should ensure that the operating personnel are competent to undertake micro lending activities. This supports the contentions that quality of the staff is important in the sound credit management system. The important of quality of the staff has also supported by the study of (Richard et al, 2008) that quality of the staff and guidelines are also influence the effectiveness in credit risk management systems.



Source: Data Collection

Figure 4.2: The number of NMB Credit Section Staff

4.3 Credit Risk Management Unit

Table 4.3 : Credit Risk Management Unit: Response from Q.5

	Number of Respondents	Percentage
YES	113	90.4
NO	12	9.6
TOTAL	125	100

Source: Data Collection

The table 4.4 above analysed that, among 125 respondents given questionners:113 of them which is 90.4% agree on the question and only 12 which is 9.6% oppose. This means that, majority of NMB Branches have Credit Risk Unit.

4.4 Policies and Procedure to Monitor and Control Credit Risk

Table 4.4 : Policies and Procedure to Monitor and Control Credit Risk: Response from Q.18

	Number of Respondents	%
YES	99	79.2
NO	26	20.8
TOTAL	125	100

Source: Data Collection

The table 4.5 above analysed that, among 125 respondents given questioners: 99 of them which is 79.2% agree on the guestion and only 26 which is 20.8%oppose.This means that majority of NMB Branches have policies and procedure to monitor and control credit risk.

4.5 Monitoring and Control Measures of Credit Risk in NMB. Response from Q.7

The analysis show that, among 125 respondents given questioners,75 of them which is 60% agree on the question and only 50 which is 40% oppose. This means that majority of NMB Branches have system of monitoring and control of credit risk.

4.6 Control and Precautions. Response from Q.18

The finding show that, among 125 respondents given questioners,95 of them which is 76% agree on the question and only 30 which is 24% oppose. This means that majority of NMB Branches have system of Control and Precaution of credit risk.

In addition the studies of (Wyman,1999;Koford and Tschelg,1997) has also been observed that high quality credit risk management staffs are the essential to guarantee that depth knowledge and judgmental needed is always available ,this in turn bring about the successfully managing the credit risk in the commercial banks. This also has been supported by the study of (Wenner et al, 2007) who reported that a good credit system depend essentially on the capable of staff and on accurately and timely information. Other factor such as management information systems, the application of sophisticated mathematical techniques and the availability of efficient and low cost communication technology can facilitate credit analysis but cannot replace the need for capable staff and quality information. Financial Institutions still depend on knowledge, experience, and judgment to provide input to these models. Thus a human factor remains key element in the successful risk management.

Technology is widely acknowledged to be a key component of effective credit risk management. National Microfinance Bank has a computerized system knowing as the Equinox5 this system fed with some information's and help in analyzing them and it generate the report on weekly and monthly basis. The report used for making various decisions on managing credit risk in the bank. The computers are also used by the bank in performing some analysis while assessing and managing borrowers.

According to (Jeremy and Stein, 1999; Donaldson, 1994) computers are useful tool in credit analysis, monitoring and control as they make easier to keep the track on trend of credits within the portfolio. (Marphatia and Tiwari, 2004) contend that risk management is fundamentally about people and how they think and how the interact with others. Technology is just a tool but if fall into wrong hands it is useless.

Screening borrowers to evaluate its creditworthiness is an activity that has widely been recommended by, among others, (Derban et al., 2005). The recommendation has been widely put to use in the banking sector in the form of credit assessment. According to the asymmetric information theory, a collection of reliable information from prospective borrowers becomes critical in accomplishing effective screening. The study reveal that to ensure essential screening of the borrowers, the NMB carry out the credit investigation and evaluation before granting the loans. A borrower as well as business/project appraisal will be carried out to ascertain the creditworthiness of the borrowers as well as the viability of the businesses. The borrower appraisal involves the five Cs of credit which includes character, capacity, capital, condition, and collateral. This involves a personal judgment and they play a big role in credit assessment especially in developing country where the use of quantitative credit scoring model is not possible due to the lack of proper record keeping and lack of effective database system in various sectors within the country. This has also being supported by the study of (Richard et al, 2008).

According to (Brant, 1999; Chijorika, 1997) the appraisal of borrowers' creditworthiness carried out by the use of qualitative technique. Its main challenge is that, it has their subjectivity nature. But still, the borrowers features assessed through qualitative model can be allocated numbers with the sum of the values compare to a threshold. The NMB micro credit policy stipulate that adequacy of collateral includes not only whether the collateral offered by applicant has a value greater than loan amount, but also whether the ownership can be documented. Asset for collateral must be sold according to their resale value, i.e. the amount for which bank can sell them in the market if the bank has to seize the asset. The resale value must be at least

150% of the resale amount. This emphasize the point that adequate of collateral is important thus size of loan should vary depend on collateral attached to the loan. Siam (2007) argued that nature of credit risk confront the bank varies with the size of the loan and the pledged collaterals. This implies that bank demands greater collaterals as the size of the loan are great too. Sufficient collaterals will reduce the level of potential future default risks. In addition the study reveals further that the bank does not look at collateral as the first source of repayment loan. Loan are repaid from the cash generated by a profitable enterprise managed by entrepreneur who is of good character and is financial reliable. A loan should never be made only on the basis that collateral is adequate.

However for larger micro, small or medium enterprises taking collateral lowers the bank's risk somewhat, in addition it is recognized that the Bank's ability to seize such collateral may be limited due the procedure for taking the collateral and selling as it may be time consuming and expensive. But still collateral will be required to reduce the bank's risk exposure and also to demonstrate the borrower's good faith. (Bloomquist, 1984) argues that when the creditors have extensive rights to repossess collateral assets there is strong possibility that they can reduces their risk of losses on one hand and borrowers will be more responsible to pay when their assets are at stake this study is consistent with the study of Siam (2007) writes that collaterals are very effective means that force borrowers to fulfill their commitments and obligations to lenders. The study can conclude that loan applicant who is reluctant or unwilling to give collateral this should be a red flag to the loan officers.

Furthermore the study reveal that NMB use both formal and informal collateral for granting loan thus; land/landed property with the letter of Offer of Right of

Occupancy can be accepted by NMB as a security for loans provided the authenticity of the offer is verified with land Registry Office and a Notice of Deposit of Title (Form no 009), is executed by the bank acknowledge receipt of this offer. However, in case of Land/Landed Property without any document of Title a special form (Form no 010) will be used to in the transfer of interest on the houses to the bank until the loan is paid. *This document should be witness by local authorities.* In addition study reveal that a Guarantee, Life Assurance Policy, Legal Mortgage, share certificate of reputable company listed on stock exchange and lien on bank balances as well as fixed deposits also are accepted as security against loan. Lastly table 3.1 below provides information about the most commonly pledged items and their resale value. Loan officers should value such collateral within the range of the second hand price and the price offered by the auctioneer.

Another factor which contributes to the effective credit risk management system is monitoring of borrowers. Monitoring borrowers' respective activities, their performance, as well as behaviour is the concern, by both branches and corporate division. Monitoring the flow of borrowers business through the bank account, regular review of borrowers report as well as on-site visit is also performed by the bank. The follow up may be expected to consume up to 40% of the loan officers time; to establish whether there are any changes that need to be taken care of to protect non-repayment of credits.

Furthermore the study reveal that early payment does not mean an automatic entitle the borrower to a new and large loan. The number of factors will be considered before a new loan is granted. The decision will rest on the loan officer evaluation of the customer.

Table 4.7 Lists of Commonly Pledged Items

ITEM	PRICE RANGE OF NEW ITEM	PRICE OF SECONDARY HAND	PRICE OF ITEM AUCTIONED BY MAJEMBE
TELEVISION	Tsh 200,000-350,000	Up to Tsh. 180,000	Approximately 50,000
DECK	Tsh 150,000-250,000	Up to Tsh. 100,000	Approximately 40,000
REFRIGERATOR	Tsh 250,000-500,000	Up to Tsh. 150,000	Between Tsh 40,000-100,000
DEEP FREEZER	Tsh 450,000-700,000	Up to Tsh. 300,000	Approximately 100,000
RADIO CASSETE	Tsh 100,000-180,000	Up to Tsh. 80,000	Between Tsh 37,500-50,000
SEWING MACHINE	Tsh 150,000-250,000	Up to Tsh. 100,000	Between 50,000 – 23,000
MUSIC MACHINE	Tsh 300,000-450,000	Up to Tsh. 250,000	Approximately 80,000
VIDEO CAMERA	Tsh 580,000-750,000	Up to Tsh. 135,000	Approximately 80,000
GENERATOR	Tsh 580,000-750,000	Up to Tsh. 150,000	Approximately 40,000
COMPUTER (DESK TOP)	Tsh 600,000-1,500,000	Up to Tsh. 300,000	Approximately 60,000
COMPUTER (LAPTOP)	Tsh 1,000,000-2,000,000	Up to Tsh. 600,000	Approximately 60,000

***Source*: NMB Operation Manual Volume 5A**

The important of monitoring borrowers have also been said to essentially as existing and potential exposure change with both passage of time and movement in underlying variables by the study of (Donaldson, 1994; Mwisho, 2001, Basel, 1999), and also very important in dealing with moral hazard problem (Derban et.al., 2005). This study is also consistent with the study of (Wenner, et.al, 2007) as they argue that direct monitoring of the client is essential the institution has to visit the customer randomly to reduce moral hazard and alert upper management if the client is likely to default due to the observed problem.

According to (Basel, 1999; Mwisho, 2001; Tummala and Burchett, 1999) monitoring of customer, among others, include engage in the frequency contact with borrowers, formulate the culture of being supportive to borrowers whenever they are recognized to be in difficulties and are striving to deal with the situation. Creating an environment that will be seen by the borrower as a solver of the problem and trusted adviser; monitoring the flow of borrowers business through the bank account, regular review of borrowers report as well as on-site visit, updating borrowers' credit files and periodically reviewing the borrowers rating assigned at the time credit was granted.

In case of default on interest or principle or both on part of borrower's a formal reminder procedure are to be initiated. Equinox5 system will provide an immediate arrears report as the borrower has failed to pay an instalment on time. The most productive visit by a loan officer to a borrower in arrears is a visit the next day after a repayment is missed.

The longer the borrower is allowed to continue in arrears, the less likely it is that the arrear will ever be paid and the less productive follow up efforts become. A visit to a borrower in arrears should never be delayed.

The bank uses credit limits, inspection and review, rescheduling and different recovery procedures for controlling credit risk. Rescheduling is performed only if the borrower demonstrates that he is willing and able to pay within the period of original loan or shortly. There will be other similar cases where borrower's circumstance has clearly changed his/her ability to repay and willingness is evidenced but relatively long period of time is needed for repayment. Another case involves the death of the borrower where relatives agree to continue to run business and assume the debt. Otherwise, the bank undertakes recovery procedures. According to the study of (Richard et al, 2008) aging technique is used for quantitative review and a specified checklist for qualitative review. Rescheduling is performed only to problem credits whose interests have been paid in fully and at least 10 percent of the principal have been paid. Otherwise, the bank undertakes recovery procedures.

The National Microfinance Bank also takes hold of ethical issue and the relationship of the customers and loan officers serious. Bank wishes to build good relationships with customers in order to retain them and to avoid unethical issue in bank practice. Taking gifts or favors from loan applicants in return for more favorable treatment of customers request constitutes direct conflict of interest and such gifts or favors shall be treated as bribes. This is detrimental to the bank's image and business. When there is existing close relationship between loan officer and customer the Bank managers will ask another officer to perform the duty so as to avoid the suspicion of corruption on the part of loan officer. It is vital that there is total transparent with no possibility of malpractice possible process of a loan applicants when there is any misconduct the officer will de dismissal from work. Swarens, (1990) wrote that credit culture has emerged as an important determinant of credit quality for all types of lending. Subordinate have to be responsible and professional in order to prevent from being bias when evaluating loan application. Management must also insure that the reward system compensate good ethical practices and panelizes unacceptable and flawed procedures.

In addition NMB provide various trainings to their employees in the credit risk management department. Training comes from both in-house and outside expert. The bank also sends its staff to various trainings to improve and update their knowledge and skills in credit risk management. According to Swarens, (1990) a full trained consumer loan officer should have superior presentation skills good knowledge of consumer protection laws to reduce the risk of committing a discriminatory mistake. Loan officers should also have the ability to remedies to a problem to ensure that customer received the best type of advice and services. Ethical standard and behavior among subordinate can also be enhanced by training and promotional opportunities. Bank managers must learn from past mistakes and must be equipped with skills and knowledge to master the fundamentals of loan administration (Morsman, 1985). In addition (Farrissey, 1993) suggested that a training program from community banks to avoid the stormy seas of imprudent lending.

The study also reveals that NMB has a well established credit department. This help to ensure that branch managers and loan officers are compliance with the laid down procedures on lending process to mitigate risk.

Finally I concludes that overall factors which influencing effectiveness in credit risk management in NMB includes sufficient policies and procedure, techniques used to evaluate customers, process of monitoring borrowers', facilitating factors such as quality of staff and technology, proper training of staff in credit risk management, ethical behaviour, continuous good relationship between customers and loan officers, adequate control over credit in addition the bank has credit inspection which are done to ensure compliance with the National Microfinance Bank's Credit policies. The aim of the policy is to instill the necessary discipline in credit operations to meet standards set by the bank on lending and improving portfolio quality by identifying deficiencies and potential problems at early stage. The efficient management of credit system is a vital important part of the overall risk management system and is crucial to each bank bottom line and eventually the survival and growth of banking organization. Credit risk management if implemented correctly and effectively can be a value enhancing activity that goes beyond regulatory compliance and can provide a competitive advantage to financial institutions that execute it appropriately.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

Generally this study aims at assessing the effectiveness of credit risk management systems in financial institutions. The research goal was to identify those factors that have significant influence on credit risk management effectiveness among the financial institutions in the country so that credit risk can be mitigated.

The researcher observed that factors influencing effectiveness in credit risk management include sufficient policies and procedure, quality of the staff and technology. Other factors include training of employees in credit risk management department and screening borrower's creditworthiness which uses both qualitative and quantitative factors. However, the judgmental methods has been observed to be commonly used in developing country—the 5 Cs which include character, capital, capacity, condition and collateral are used to evaluate customer creditworthiness. The use of quantitative credit scoring model has been difficult due to the lack of database system and poor record keeping in some of the various sectors within the country.

Furthermore ethical issue and continues good relationship between loan officers and customers has been taken serious as they influence a sound credit risk management, monitoring borrowers which are done on continues basis as it reduces the moral hazard problem. In addition, in case of default on interest or principle or both on part of borrower's a formal reminder procedure are to be initiated. The most productive visit by a loan officer to a borrower in arrears, is a visit of borrower immediately after a repayment is missed. The longer the borrower is allowed to continue in arrears, the less likely the arrear will ever be paid and the less productive follow up efforts become.

5.2 Conclusion

The study aims at assessing the effectiveness of general credit risk management systems in financial institutions and find out those factors that have significant influence on credit risk management effectiveness among the financial institutions in the country so that credit risk can be mitigated.

The study revealed that the overall factors which influencing effectiveness in credit risk management in NMB includes sufficient policies and procedure, techniques used to evaluate customers, process of monitoring borrowers, facilitating factors such as quality of staff and technology, proper training of staff in credit risk management, continuous good relationship between customers and loan officers, adequate control over credit, and credit inspection which are done to ensure compliance with the National Microfinance Bank's Credit policies that all aims to instill the necessary discipline in credit operations to meet standards set by NMB on lending and improving portfolio quality by identifying deficiencies and potential problems at early stage.

On the review of the empirical evidence the study reveals that quality of staff is vital important factor for the sound credit management system as they will be capable of providing all the knowledge and judgemental needed. In addition the studies of (Wyman,1999; Koford and Tschelg,1997) has also observed that high quality credit risk management staffs are the essential to guarantee that depth knowledge and judgmental needed is always available which in turn bring about the successfully management of credit risk in the commercial banks. Technology, accurately and timely information also plays a big role on sound credit system.

Furthermore it has been observed that computers are useful tool in credit analysis, monitoring and control as they make easier to keep the track on trend of credits within the portfolio but in a wrong hand they are useless. Financial Institutions still depend on knowledge, skill, experience, and judgment to provide input to the models. Thus a human factor remains key element in the successful risk management.

Screening borrowers to evaluate its creditworthiness has been widely been used in by the financial institutions. According to the asymmetric information theory, a collection of reliable information from prospective borrowers becomes critical in accomplishing effective screening. To insure essential screening of the borrowers the bank shall carry out the credit investigation and evaluation before granting the loans.

A borrower as well as business/project appraisal will be carried out to ascertain the creditworthiness of the borrowers as well as the viability of the businesses. The borrower appraisal involves the five Cs of credit which includes character, capacity, capital, condition, and collateral. This involves a personal judgment and they play a big role in credit assessment especially in developing country where the use of quantitative credit scoring model is not possible due to the lack of proper record keeping and lack of effective database system in various sectors within the country. This has also being supported by the study of (Richard et al, 2008). However some studies has reported that ,the appraisal of borrowers creditworthiness carried out by the use of qualitative technique and the main challenge is that, it has their subjectivity nature. But still the borrowers features assessed through qualitative model can be assigned numbers with the sum of the values compare to a threshold.

Financial institutions focus on the quality and quantity of assets that can be pledged as collateral and the quickly liquidated in the event of default. However the bank does not look at collateral as the first source of repayment loan. Loan are repaid from the cash generated by a profitable enterprise managed by entrepreneur who is of good character and is financial reliable. A loan should never be made only on the basis that collateral is adequate.

According to the analysis monitoring borrowers' is vital and it should be on continuous basis so as to reduce moral hazard problem. In addition the study reveal that most productive visit by a loan officer to a borrower in arrears is a visit the borrower immediately after a repayment is missed. The longer the borrower is allowed to continue in arrears, the less likely it is that the arrear will ever be paid and the less productive follow up efforts become. Various studies have suggested that following up late loans quickly are among the deliberate measures to reduce the credit default. Successful institutions have also developed products and services delivery methodologies which screen out business that can not or would not pay and keeping the best customers with a good on time repayment records.

Effective credit risk management involves establishing an appropriate credit risk environment, operating under a sound credit granting process, maintaining an appropriate credit administration that involves monitoring process as well as adequate control over credit (Basel, 1999; IAIS, 2003). It involves top management to ensure that there is proper and clear guidelines in managing credit risk it emphasize that top management should ensure that all guidelines are communicated throughout the organization and that everybody involves in credit risk management understand.

In developing countries enormous credit expansion has being due to the wide dispersion of risk transfer technique which include things such as insurance, securitization, and derivatives and wide acceptance of different type of collateral such as inventories, account receivables and warehouse receipts (Wenner et al, 2007).

Also I conclude that the environment within which the bank operates is a very important to be considered in the understanding of the credit risk management system. However, it has been reported that currently there is no standardized method used by financial institution for assessment of credit risk. A critical evaluation of the most popular credit risk assessment methods include judgmental method, credit scoring and portfolio models though it has been reported that they have some limitations when used on their own.

But study reveal that judgmental method have been used in many developing countries. But the credit scoring model has not been used. According to (Brant, 1999; Chijorika, 1997) the appraisal of borrowers creditworthiness carried out by the use of qualitative technique its main challenge is that it has their subjectivity nature. (Santorome, 1997; Chijoriga 1997) wrote that important of credit rating system signify changes in expected level of loans loss accomplished that quantitative models make it potential to amongst others, numerically establish which factors are significant in explaining default risk, be more able to screen out bad loan applicants and be in a better position to calculate any reserve needed to meet expected future loan losses. The credit risk assessment tool should be combined for effective credit risk assessment (Kalapodas and Thomson, 2006).

5.3 Recommendations

In view of findings from the study, the following are the recommendations to both financial institutions and to the government.

5.3.1 Recommendation to the Financial Institution

Minimizing the credit risk is the one of the most important responsibilities of financial institutions today to ensure survival and growth. Observing the fact that loan draws a bigger part of their profit. Therefore the study has the following recommendation toward their survival and growth.

- Since bank can not abandon lending operation, it is imperative for the bank to stretch out its effort on credit risk management by increasing employees awareness on reportable events, increase its training, workshop program especially to the loan officers and other official in credit risk department enlighten them on credit risk losses, thus bank should not rely on-job training as the only weapon to impact credit risk knowledge to employees**.**
- Corruption has been observed to be one of the factors which hinder sound credit risk management system in the financial sectors in Tanzania. Bank should embark to ensure that there is a total transparent with no possibility of malpractice possible process of loan applicants. In addition Banks' hiring

practices should ensure personnel are committed to strict professional ethics and comfortable in high ethical standard and behavioral environmental.

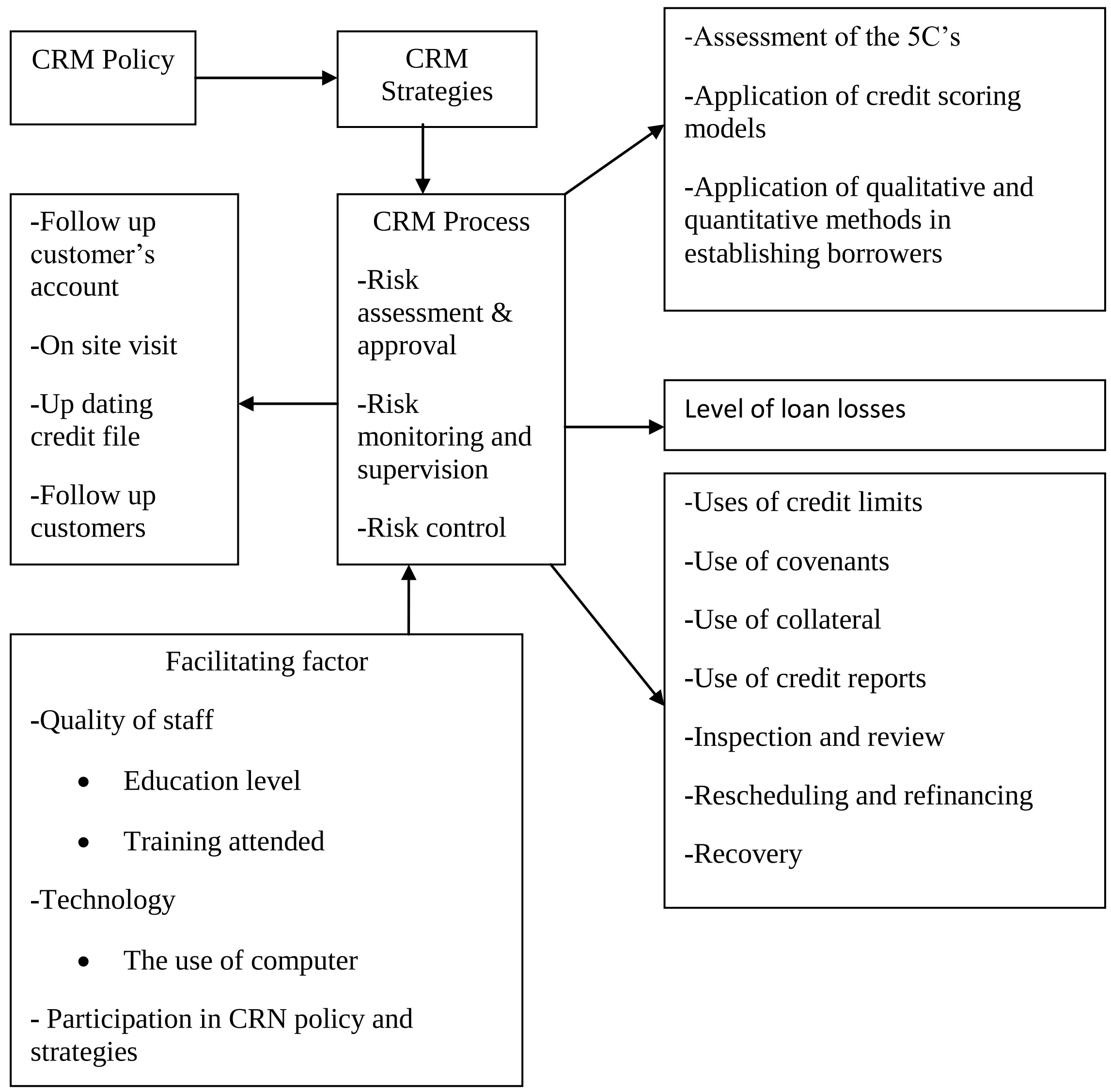
- Quality of staff also has been observed to play an important role in effective credit risk management system. The staff experience, judgments, skill, knowledge and strong commitment to their work is essential for a sound credit risk management system. A sound credit system can be enhanced by training the employee in credit risk management. The researcher advised the bank to provide training on continuous basis to their staff. As suggested by various study that loan officers are supposed to have a good knowledge of consumer protection laws and the ability to identify alternative solutions to problems. A full trained loan officer should have superior presentation skills good knowledge of consumer protection laws to reduce the risk of committing a discriminatory mistake (Swarens, 1990). Loan officers should also have the ability to remedies to a problem to ensure that customer received the best type of advice and services. Ethical standard and behavior among subordinate can also be enhanced by training and promotional opportunities. Bank managers must learn from past mistakes and must be equipped with skills and knowledge to master the fundamentals of loan administration (Morsman, 1985).
- Financial Institutions have to increase the number of credit officers and facilities such as computer so that clients can timely be attended, make follow-up easy and speed-up loan processing. Such aspects would bring in positive effects to a sound credit risk management system.
- The study also reveal that since some collaterals are informally registered of which NMB Ltd have been relied upon for loan issuance to its customers e.g.

houses located in squatter areas, land as per land act of 1999 and amended in 2004 under the coordination of Bank of Tanzania, those authenticated by ten cell leaders, street local government leader, ward government leader and court certification.

However, it is noted that there is no control in these offices no database system and no recordkeeping; unfaithfully customers can use this loop-hole to secure loans from different financial institutions using the same collateral and the same business ending up with multiple loans due to this delinquency hence loss to the bank. Knowing this the study suggest that financial institutions should collaborate to find a single unit for document certification of collateral. Tanzania Bank Association may be used as a bridge to this.

- The financial institutions need to collaborate for improvement and registering of their customer on risk transfer mechanism such as credit insurance in case of death to the customer.
- The bank should provide the entrepreneur skill to SMEs this can be done through training, narrative brochures, seminar, leaflet, radio, and TV this will enable them manage business with good knowledge and skills. Godquin (2004) found out that borrowers who had access to basic literacy might have access to more profitable projects or might be able to generate more cash out of a project.

Membership training, which relates to non-financial services, had positive influence on loan repayment (Khandker et al, 1995). This in turn will minimize loan losses.



→ Influences → Constitute

Source : Data collection

Figure 5.0 : Credit Management System of a Bank in Tanzania

5.3.2 Recommendation to the Government

Financial institutions play an important role in the economic development of any country. Due to this, the government is advised to facilitate and create enabling environment so as to promote this sector by doing the following;

- The government should create conducive environment for financial institutions to increase their coverage and outreach in both rural and urban areas. The researcher observed that Tanzania government have done a lot of amendments on policies which contribute to the credit mitigation such as Land Act of 1999 as amended 2004, increase the numbers of surveyed area under the Ministry of Land, for those who possess houses in squatter arrears they have being provided with License under the Land Act of 1999 No 4 however the study reveal that these exercise has not covered all areas therefore government should insure that all areas are provided with this services. These documents can be used as collateral and knowing the important of collateral this help the financial institution to reduce the loan losses in case of default by borrowers. And help the SMEs excess to credit.

5.4 Suggestions for Future Research

It is suggested that empirical research to be undertaken focusing on the following:

1. This study covered only NMB bank the similar research should be conducted in other financial institutions and Microfinance institutions so as to get insight into the factors influencing effectiveness of credit risk management system in the country.
2. It is also recommended that a study to be conducted to find out the role of government in the sound credit risk management system in developing country.
3. The study also suggests that research should be conducted on effectiveness of credit information bureau that will assist stakeholder to deals with multiple loan problems.

REFERENCES

Altunbas, Y., Gambacorta, L. & Marques-Ibanez, D. (2009). Bank Risk and Monetary Policy. Working Paper Series No 1075.

Basel (2004). “Bank failures in mature economies”, Working Paper No. 13, Basel Committee on Banking Supervision, Basel.

Basel (1999). Principles for the Management of Credit Risk. Consultative paper issued by Basel Committee on banking supervision, July, 1999.

Brealey, R.A., Myers, S.C., Marcus, A.J. (2007). Fundamental of Cooperate Finance, McGraw- Hill 5th edition.

Brown Bridge, M. and Harvey, C. (1998). Banking in Africa, James Currey, Oxford

Brown Bridge, M. (1998). “Financial distress in local banks in Kenya, Uganda and Zambia: causes and implications for regulatory policy”, Development Policy Review Journal, Vol. 16 No. 2, pp. 173-89.

Calomiris, C.W. & Himmelberg, C.P. (1993). ‘Directed credit programs for agriculture and industry : arguments from theory and fact’, In: Proceedings of the World Bank Annual Conference on Economic Development, Supplemented to the World Bank Review and the Third Word Research Observer, 1994, pp 113-13.

Chijoriga, M. (2001). Performance and Sustainability of Micro finance Institutions in Tanzania, a paper presented at TGT Bagamoyo 18th august 2001

Davies, A and Kerans, M. (1994). Banking Operationss: UK Lending and International Business.

Davies, A and Kerans, M. (1994). Banking Operations: UK Lending and International Business. Pitman Publishing.

Derban, W.K., Binner, J.M. and Mullineux, A. (2005). "Loan repayment performance in community development finance institutions in the UK", Small Business Economics, Vol. 25, pp. 319-32.

Dell'Ariccia G., Igan D. and Laeven L. (2008). "Credit Booms and Lending Standards:

Donaldson, T.H. (1994). Credit Control in Boom and Recession, The Macmillan Press, Basingstoke.

Farrissey, J., (1993). Commercial Credit Training in Community Bank. The Journal of commercial Bank Lending 75(7): 26-33.

Fun Ho, C.S., and Yusoff N.I., (2009). A preliminary Study on Credit Risk Management Strategies of selected Financial Institution in Malaysia. Journal 28, 45-46.

Giesecke, K. (2004) Credit Risk Modelling and Valuation: An Introduction. Credit Risk: Models and Management, Vol.2.

Greenbaum, S.I., Thakor, A.V. (1987), "Bank funding modes: securitization versus deposits", *Journal of Banking & Finance*, Vol. 11 pp.379-401.

HM Treasury, (2004). The Orange Book Management of risk - Principles and Concepts online available for *http://www.hm.treasury.gov.uk.meadi /FE9/60/FE66035BCD-D4B3-11057A7707D2521F.pdf*

Hoque, M. Z. (2004). Flawed working capital loan policy and loan default: Evidences from Bangladesh, Journal of Accounting, Business and Management, Vol.11, No. 2, pp.202-213.

IAIS – International Association of Insurance Supervisors (2003). paper on Credit Risk Transfer between Insurance, Banking and Other Financial Sectors, March.

Kalapodas E. and Thomson E., (2006). Credit Risk Assessment: A Challenge for Financial Institution Journal of Management Math 17, 25-46

Keys B., Mukherjee T., Seru A. and Vig V. (2008). "Did Securitization Lead to Lax

Koch, T.W. (1995). "Bank Management", the Dryden Press, Harcourt Brace College Publisher.

Kothari C.R. (2004). Research Methodology Method and Techniques, Revised Second Edition, New Age International (P) Ltd Publishers

Lando, D. (1998). On cox process and credit risky securities. Review of Derivative Research, Vol. 2, pp.99-120.

Miller, S. (2008, April 10). *The Importance of Credit Risk Management for Banking*

Morsman, E.M., (1985). Defending the Loan Portfolio The Journal of Commercial Bank Lending 67(8): 2-7

Ozdemir. O and Levent. B (2004). Discussion Paper 2004/20. An Empirical Investigation on Consumer Credit Default Risk.

Pyle D.H, (1997). Bank Risk Management: Theory, Research Program in Finance, Working Paper RPF – 272.

Richard, E., Chijoriga M., Kaijage F, Peterson, C., and Bohman, H. (2008). Credit Risk Managements System of Commercial Bank in Tanzania, International Journal of Emerging Markets Vol. 3, pp323-332.

Santomero, A.M. (1997). Commercial Bank Risk Management: An Analysis of the Process, The Wharton School of the University of Pennsylvania, Philadelphia, PA.

Shanmugan, B., Bourke, P. (1990). *The Management of Financial Institutions: Selected Readings*, Addison-Wesley Publishing, Reading, MA,

Saunders and Cornett (2005). Financial Institution Management. McGraw Hill

Saunders, M. Lewis, P. and Thornhill, A. (2007). Research Methods Business Students, 3rd edition, Person education.

Screening? Evidence from Subprime Loans 2001-2006”, mimeo.

Swarens, R.B., (1990). Managing risk in consumer loan portfolio. The Journal of Commercial Bank Lending 72(4): 4-8.

Siam A.Z (2007). (Pg 134-7). Journal of Social Sciences. Effects of Collaterals Pledges in Reducing Credit Risks. Science Publications.

Summers. B, Nicholas. W (2000). Trade credit Management and Decision to use Factoring: An Empirical study" Journal of Business Finance and accounting, 37-67.

Thygerson, K.J. (1995). Management of Financial Institutions. New York, Harper Collins College.

APPENDICES

Appendix i: Questionnaire on Credit Risk Management in NMB

Introduction

I am a student at Open University of Tanzania. Currently am doing a research on Credit Risk Management to NMB in Dar es salaam ,as part of the partial fulfilment of the MBA in OUT.

I kindly request your time in responding to the attached questionnaire questions as detailed in the following pages. Your sincere response will help to make this study a success and as well make real contribution to the accuracy and success of this study.

Your replay will be strictly confidentially and will be used only for the purpose of this study. Your assistance will be greatly appreciated.

Thank you in advice.

Gerald A.Semgomba

Questionnaire on Credit Risk Management in NMB?

Qn 1:Please provide the name of your Branch………………………………

Qn 2:Describe your title/position in the Bank……………………………...

Qn 3:How long have you been in the banking industry?.

Please tick one option

Less than a year ………..

Between 1 and 3 years ……….

More than 3 years ……….

Qn 4: Level of education you have attained?

Please tick one option

Ordinary Diploma ………

Advance diploma ………

University degree ………

PHD degree ………

Professional (Banking, Accountant or Auditing) ………

Others(Specify) ………

Qn 5: Does your Branch have Credit Risk Management Unit?

Yes/No

Qn 6:If yes how large is the unit in terms of staffing?

Please tick one option

Less than five people ……….

More than five people ………

Qn 7: Are there any policies and procedures to monitor and control credit risk in your bank?.

YES/NO

Qn 8: Does your bank have a system of reviewing credit risk?.

YES/NO

Qn 9:Is Management control of risks in your bank ,is assessed and credit risk management activities are monitored aggregated and reported upwards through the organization to the government board or equivalent?.

YES/NO

Qn 10.Is Internal Controls in managing credit risk at your Branch is effective?.

YES/NO

Qn 11.Does your NMB Branch communicate credit risk management programs to all credit officers?

YES/NO

Qn.12.Does your NMB Branch provide training of credit risk to their staffs?.

YES/NO

Qn.13 .Does your NMB Branch have enough staffs deal with credit risk management?

YES/NO

Qn.14.Does NMB Branch have system for reviews credit risk?.

YES/NO

Qn.15.Has the Bank developed and maintained a business contingency plan for staffs to be trained on credit risk management?

YES/NO

Qn.16.Does your Bank have a well formal structured training program on credit risk management.

YES/NO

Qn.17.How often does the system to identify credit risk being reviewed?.

Please tick one option

Monthly

Quarterly

Semi Annually(6 months)

Annually

More than one year

Qn.18. Are there any policies and procedure to monitor and control credit risk in your Bank.

YES/NO

Qn.19.Are there any System of Control and Precautions to monitor and detect risk in credit in your Branch?

Appendix ii: Research Activities or Schedule or Timeframe

TASK	Weeks											
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th
Read Literature												
Finalize Objectives												
Draft Literature Review												
Devise Research Approach												
Review Secondary Data												
Organize Survey												
Develop Survey Questions												
Analyze Secondary and Primary Data												
Evaluate Data												
Findings Chapter												
Draft Conclusion												
submit and Await Feedback												
Print, Bind												
Submit												

Appendix iii: Budget

CATEGORIES	QUANTITY	ITEM COST	AMOUNT
Photocopy paper	50 reams	80,000.00	400,000.00
Accessories	1 box of pen	15000.00	15000.00
Printing	1000pages	500.00	500,000.00
Photocopying	2000pages	50.00	100,000.00
Internet(Wireless)	4GB(ZANTEL)	40,000.00	1,200,000.00
Preparation of research tools	5day	60,000.00	60,000.00
Pilot study	5day	60,000.00	60,000.00
Data process	Software	240,000.00	240,000.00
Literature and documentation survey	1 week	60,000.00	60,000.00
Allowance for field work			1000,000.00
Transport			300,000.00
Communication			200,000.00
Final report			400,000.00
Total			**4,115,000.00**