

FACTORS INFLUENCING MANAGEMENT OF CREDIT RISK FOR
MICRO AND MEDIUM ENTERPRISE LOANS A CASE OF EQUITY
BANK THIKA BRANCH, KENYA

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DECLARATION

This research project report is my own original work and has not been presented for the award of a degree in this university or any other learning institution.

Signature..... Date.....

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L50/72006/2011

This research project report has been submitted for examination with my approval as the university supervisor.

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DEDICATION

I dedicate this work to my Mother Lucy Njeri and friend John Mukundi for the moral support and patience in the course of my studies. You gave me the aspiration and determination to carry on this far.

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ABBREVIATIONS IN USE

ANOVA	Analysis of Variance
CBK	Central Bank of Kenya
EBIT	Earnings Before Interest and Taxes
EBL	Equity Bank Limited
LA	Loan Agreement
NPA	Non Performing Assets
PAR	Portfolio at Risk
SME	Small and Medium Enterprise
SPSS	Statistical Packages for Social Scientists

ABSTRACT

There has been an increased concern over high credit risk for micro and medium loans in financial institutions. High interest rates, collaterals for micro loans, credit rating, business experience and training, and loan recovery play an important role in managing credit risk for micro and medium loans. The objectives of this study was to establish the influence of interest rates on credit risk management of Micro and Medium loans in equity bank limited, to find out the influence collaterals play in credit risk management of Micro and medium enterprise loans in equity bank, to assess the influence of business knowledge and experience in credit risk management of Micro and Medium enterprise loans in equity bank, to find out the influence of credit rating in credit risk management of micro and medium loans and to find out the influence of recovery mechanism on credit risk management of micro and medium enterprise loans in equity bank limited. The study utilized descriptive research design and employed stratified random sampling to select a sample of 80 customers from a target population of 5200 customers of Equity bank in Thika town. Both primary and secondary data was collected through interviews, questionnaires and review of existing bank and central bank records. The data collected was analyzed using both quantitative and qualitative methods. Frequencies, graphs and proportions were used in presentation and interpretation of data. Use of Statistical Package for the Social Sciences simplified data analysis. The study found out that as interest rate went up, credit risk increased as the business profitability was reduced by high interest rate at times making it impossible to breakeven. Collateral was found to influence credit risk management. Where customers felt that security used for the loan was adequate, the rate of default was low. Similarly business knowledge and experience also influenced credit risk management. Most of the non performing loans were for those customers who had less business experience at the time of borrowing. Another factor influencing credit risk management is credit rating. It was found out that customers with a good credit history were less likely to default. Recovery mechanism is another factor influencing credit risk management. It was found out that many non performing customers paid after legal action was instituted against them. The research concluded that interest rate affects customers' repayment ability and consequently default rate. Similarly when adequate security is used, risk of default reduces since in event of default, the pledged asset can be sold to recover the amount lent. The study also concluded that customers with more business experience are less risky to lend to compared to customers with little or no experience. Similarly customers with a good repayment history are less risky than customers with a poor credit history. The study further concluded that a good recovery mechanism reduced credit risks. The study recommended that, lending institution should carry out a comprehensive market survey to identify an interest rate commensurate with the prevailing business environment. Lending institutions should also ensure that the loans are adequately secured. The institutions should be cautious in lending to customers without business experience or without existing businesses. The institutions should also mitigate against lending to customers with a poor credit history. Recovery mechanism should be planned and instituted promptly in the event of default.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Credit is a transaction between two parties in which one, acting as creditor or lender, supplies the other, the debtor or borrower, with money, goods, services, or securities in return for the promise of future payment. As a financial transaction, credit is the purchase of the present use of money with the promise to pay in the future according to a pre-arranged schedule and at a specified cost defined by the interest rate. In modern economies, the use of credit is pervasive and the volume enormous. Electronic transfer technology moves vast amounts of capital instantaneously around the globe irrespective of geopolitical demarcations (Zicchino, 2003).

In a production economy, credit bridges the time gap between the commencement of production and the final sale of goods in the marketplace. In order to pay labour and secure materials from vendors, the producer secures a constant source of credit to fund production expenses for example, working capital (Deng, 2000). The promise or expectation of continued economic growth motivates the producer to expand production facilities, increase labour, and purchase additional materials. These create a need for long-term financing.

To accumulate adequate reserves from which to lend large sums of money, banks and insurance companies act as intermediaries between those with excess reserves and those

in need of financing. These institutions collect excess money (short term liabilities) through deposits and redirect it through loans into capital (long term) assets (Sironi, 2005).

Micro business investments and loans (micro credit) is nothing new. It first emerged as a means of empowering the poor in the third world countries such as India and Bangladesh. This has enabled millions of poor to gain access to capital and loans enabling them to lift themselves out of poverty (Zicchino, 2003).

Micro credit on a small scale has been around in Kenya for many years in the form of credit unions and other regional start-up agencies. They collectively provide approximately £400 million of funding. Building Societies were originally set up in the credit union traditionally, unfortunately over a 100 years of hard work was systematically dismantled by the previous Conservative Government that allowed Kenya's largest building societies to become banks and gamble on the global derivatives casino and lose everything after bank officers had banked huge bonuses on the basis of fictitious profits.

Unfortunately, new start-ups face many additional problems other than access to capital and financing in the form of the huge amount of red tape as well as rules and regulations associated with running a business (Deng, 2000). However the red tape can be overcome, as a new large scale micro capital investments and credit programme would need to go hand in hand with reform of small business red tape as well as offer new start-up's courses and easily comprehensible information to better understand the plethora the rule and regulations that exist.

There is little evidence to show that banks have learnt from the credit crisis (Sironi, 2005). The banks are still primed to not only gamble on derivatives but increase their exposure and thus set the tax payers up for another financial crisis and subsequent bailout. The banks are betting on other banks failing so that they can be bailed out by the tax payers by claiming on the credit default swap insurance. If the government was serious about reforming the banking sector then it would be breaking them up into retail and investment banks and banning them from gambling on derivatives or relying on the interbank market for financing. And also remember this, that given Kenya's huge debt mountain, we basically do not have the means to survive another financial crisis so it is imperative that the country diversify itself out of the financial sector.

The idea of the Investment Bank is to have branches in every town and city that should also be able to make loans on a large scale to new or small businesses at low interests. This is the facility that the bailed out banks are in receipt of, the profits from which they have funneled into the pockets of bankster's in the form of outrageous tax payer funded bonuses.

Politically, the above change would require a government that is small business centric and not in the back pockets of the bank elite. Unfortunately that would exclude the supposedly business friendly conservative party as they would not be 'allowed' to take bankster's out of the credit and capital investment loop (Sironi, 2005).

A Government run investment bank would ensure that at the very least new start-ups and small business would no longer fall victim to the banking sector and misplaced priorities that are not in the long-term interests of Kenya (Sironi, 2005).

1.2 Statement of the Problem

Increase in credit risk for financial institution on small and medium loans has become common. According to Kiiru (2007), a research on loan default showed that 17 per cent were able to repay their loans from their business returns. The majority, 62 per cent of borrowers, repaid their loans under duress – repayment due to excessive peer pressure. Another 17 per cent had to sell their pre-existing assets, while four per cent had their property confiscated by financiers. Of the 260 Microfinance institutions that reported their “Portfolio at Risk over 30 days ratio” to the MIX (a World Bank clearing house for microfinance information) for 2004, the average rate of Portfolio at Risk was 4.76%, with some Microfinance institutions reporting up to 63.65% of their portfolio delinquent. Despite the application of a number of remedial measures (supplying fresh loans, loan rescheduling, imposition of penalty interest rates, denial of additional credit to repeat defaulters, management take-over of problem projects, and legal actions) in managing the credit risk, credit risk problems continued to rein the credit markets in the country. Loan default occurs when borrowers are not able and/or willing to repay loans. There are borrowers who are willing but not able to repay loans and there are borrowers who are able but not willing to repay loans. Loan default occurs in either case (Mann, 2001). It is against this background that the study seeks to establish factors influencing management of credit risk for micro and medium enterprise loans and come up with a way where by

the different aspects of credit risk can be used in managing credit risk through a standard appraisal. The study was based in Equity bank since it is the leading microfinance institution in Kenya. With over 70% of its clientele having micro loans therefore management of micro credits is a key determinant of the success of the bank (AMFI, 2013).

1.3 Purpose of the Study

The purpose of the study was to establish factors influencing management of credit risk of micro and medium enterprise loans by equity bank Thika branch and find out the magnitude of influence each factor has and how that information can be used in loan appraisals.

1.4 Objectives of the Study

The objectives of the study were:-

- i) To establish the influence of interest rates on credit risk management of Micro and medium enterprise loans in equity bank.
- ii) To find out the influence of collaterals in credit risk management of Micro and medium enterprise loans in equity bank.
- iii) To assess the influence of business knowledge and experience in credit risk management of Micro and medium enterprise loans in equity bank.
- iv) To find out the influence of credit rating in credit risk management of Micro and medium enterprise loans in equity bank.
- v) To establish the influence of recovery mechanism in credit risk management of Micro and medium enterprise loans in equity bank.

1.5 Research Questions

The study sought to answer the following research questions.

- i) What is the influence of interest rates on credit risk management of micro and medium enterprise loans in equity bank?
- ii) What is the influence of collaterals given for micro and medium enterprise loans in equity bank?
- iii) What is the impact of business knowledge and experience in credit risk management of micro and medium enterprise loans in equity bank?
- iv) What are the effects of credit rating in credit risk management of micro and medium enterprise loans in equity bank?
- v) What is the influence of recovery mechanisms on credit risk management of micro and medium enterprise loans in equity bank?

1.6 Significance of the Study

The findings made out of the analysis of the data collected provides useful information to help financial institutions formulate and design effective policies that would enable the availability of credit products suitable to the customers. The study provides literature on the financial institution lending gaps which may be useful in igniting further studies to credit institutions. The study may further influence credit institutions in Kenya to appreciate various aspects of credit management. This may also assist employees into adopting competent strategies to satisfying customers on credit facilities to ensure customer retention.

1.7 Limitation of the study

The key limitations of the study were time, resources and logistics. It was not possible to study the whole population but only a small sample of customers who have taken up loans with the bank due to the available time and the cost of administering interviews. The bank regulations requiring customers information to be confidential was a challenge when interviewing officers coupled with customers' unwillingness to discuss their financial status.

1.8 Delimitation of the Study

The study mainly focused on the performance of micro and medium business loans and was carried out in Equity bank, Thika town; the researcher collected data from identified strata based on different sectors of the economy. The targeted population of respondents comprised of Equity bank customers and staff.

The study was carried out in Equity bank Thika situated in Thika Town. The research is justified since the bank has many clients cutting across all sectors of the economy and formally founded as a micro finance institution.

1.9 Assumptions of the study

The study was guided by the following assumptions:-

- i. Information given by the respondents was true and free from any personal biases.
- ii. The sample selected was fairly representative of the population under study.
- iii. All respondents were cooperative and provided reliable responses.

1.10 Definition of Significant Terms

Bank – While financial Institutions have many different functions, their main activity is to act as a payment agent for customers to borrow, and sometimes, lend money.

Base Rate/Bank Rate – This is the minimum interest rate set by the Banks at which it can lend to its customers.

Collateral- These are tangible and intangible assets pledged to secure loans.

Credit - Means the lending of money from a financial institution to an individual or company.

Credit risk - The probability that a bank borrower or counterparty is likely not to meet its obligation in accordance with agreed terms.

Financial institution - A company other than a bank which carries on or proposes to carry on financial business and includes any other company which the minister for finance may by notice in Kenya gazette declare it to be a financial institution for the purpose of the banking act.

Fixed Rate – This means the interest is paid on the principle amount borrower and not the outstanding balance.

Interest – This is percentage of the loan amount paid by the borrower in addition to the principle as charges/cost to financial institution.

Interest rate- Percentage at which the borrower pays interest.

Loan Agreement - Your loan agreement is the formal contract, which outlines the terms of your loan (the length of your loan, the amount you have borrowed, and date of each monthly repayment) and is confirmation that you agree to its terms and conditions.

Micro loans- These are small loans designed not only to support entrepreneurship and alleviate poverty. They range from kshs 5,000 to kshs 3,000,000.

Portfolio at risk (PAR) - Total number of nonperforming assets (loans) divided by the total number of assets (loan book).

1.11 Organization of the study

In chapter one, the researcher looked at the background of the study, statement of the problem, the purpose of the study, the research objective and research questions. The researcher also examined the significance of the problem, limitations and delimitations of the study, assumptions of the study and finally the definitions of significant terms.

Chapter two present a review of the relevant literature, examine the theories relevant to the study and develop a conceptual framework for the study.

Chapter three discusses the research methodology including the research design, target population, sampling procedures and sample size, methods of data collection, data collection instruments, validity and reliability of research instruments, data analysis and presentation and finally the ethical issues to be exercised in carrying out the research.

Chapter four presents analysis, presentation and interpretation of data collected from the field. It shows how the data was first sorted and then analyzed according to research objectives. Data was analyzed and then presented in form of frequency tables and charts which were then interpreted to help answer the research questions.

Chapter five presents a summary of findings, conclusions and recommendations. The chapter concludes with recommendations for further study on enhancing credit risk management.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Over the years, financial institutions have faced difficulties for a multitude of reasons; the major cause of serious banking problems continues to be directly related to lax credit standards for borrowers and poor portfolio risk management.

This section present a summary of literature review which will be guided by the following thematic areas:- Effects of interest rates on credit risk management, the role of collaterals in credit risk management, the impact of business knowledge and experience on credit risk management, effects of credit rating on credit risk management and influence of recovery mechanism on credit risk management.

2.2 Effects of high interest rates on credit risk management.

According to Mann (2001), in economics, interest is considered the price of credit. Rittenburg, (1991) found that too high interest rate was detrimental to investment and growth. The advantages of low interest rates include; increase in borrowing, reduced inflation, increase in job opportunities and stimulation of national economy. High interest rates cause inflation which increases the cost of production or costs of goods sold. Such cost escalation can reduce earnings before interest and taxes (EBIT). At times, interest expense may not be covered by the EBIT which means that nothing is left for loan repayments. That is, high interest rates may end up with higher liabilities and if liabilities are greater than assets, borrowers will not be able to repay loans and hence, debt default occurs (Merton, 1974).

Default can occur if earnings before interest and tax is not sufficient to generate any net profit (after paying interest and taxes). These suggest that loan default can be associated with high interest rates. The question is, how 'high' or 'low' should interest rates be? Generally, banks do charge high interest rates in developing countries where financial market is imperfect as information asymmetry between borrower and lender prevails, credit-worthiness of borrowers is doubtful, value of collaterals is overstated and inefficiency is the common features at institutional level. Nobody precisely knows the degree of such imperfection. Generally banks have a tendency of charging high interest rates. This is counter-productive as high interest rates may contribute to loan default. This indicates that banks should determine appropriate lending rates on the basis of proven, not hypothetical, degree of market imperfection (Mann, 2001).

Roe (1982) suggested that real rate of interest must be lower than real return on capital. It means that as the financial market becomes more and more efficient with the process of development, lending rates should be lowered than before which may contribute towards reduced level of loan defaults. Failure to do this may result in persistent loan defaults in developing countries. Rittenburg,(1991) has identical findings that high interest rates can be detrimental to investment and growth.

Interest rates affect the way the economy functions. In short, the higher the interest rates the fewer the investment plans that will occur because it requires more money to pay the loan over time. However, investments with higher interest rates pay off more encouraging

investments in high yield arenas. This paradox encourages a careful balancing act between low interests to encourage immediate spending and high interest rates to cause long term gain (Merton, 1974).

Lower interest rates make it easier for people in order to make large purchases. These large purchases stimulate other parts of the economy by necessitating accessory purchases. For instance purchasing a car necessitates the purchase of auto care and gasoline. Lower interest rates make investing in future years easier while higher interest rates may block this. Further high interest rates will prevent many people from receiving loans or make it more expensive to get a loan. Overall the lower the interest rate, the easily money flows through the economy (Rittenburg, 1991).

The principal area of focus for reducing interest rates is to ensure that the factors influencing them are constructively addressed. These factors include perceived high risks of the venture being financed and lack of collateral, lack of a properly functioning market in financial services, high rates of default on loans, inefficient means of outreach resulting in high transaction costs, and high inflation rates. The problems of lack of collateral and high interest rates are inter-linked. Both relate to the degree of risk perceived by the bank in making the loan. On the one hand, if there is adequate collateral to cover the full extent of the loan, then much of the risk that the bank might otherwise have to carry is shifted to the borrower. As the risk to the lender of making the loan is smaller, lower interest rates are possible. On the other hand, if the borrower offers inadequate or no collateral, much or all the burden of risk of default weighs on the lender,

which incites the lender to charge a high interest rate in the event the loan is granted (Joy, 2007).

2.3 Effects of Collateral on credit risk management By Equity Bank Thika

Collateral is an item of value that is pledged to guarantee repayment of a loan. Collateral items are generally of significant value—property and equipment are often used as collateral, for example—but the range varies considerably, depending on the lending institution and variables in the borrower's situation. The value of collateral is not based on the market value. It is discounted to take into account the value that would be lost if the assets had to be liquidated in order to pay off the bank loan (Kealhofer, 2003).

A business that has a long history of profitable operations may be able to obtain an unsecured loan, a loan without collateral. A new or a small business wishing to expand is almost always going to be asked to secure a loan with collateral. Unlike unsecured loans, in which a borrower is able to get a loan solely on the strength of its credit reputation, secured loans require borrowing companies to put up at least a portion of their assets as additional assurance that the loan will be repaid. Failure to repay the loan and the bank takes the items identified as collateral. Many start-up businesses turn to collateral-based loans to get their start (Rittenburg, 1991).

Having extended the loan to the borrower, Bank would naturally like to ensure that the loan is repaid with the interest thereon. That is the Bank would need to secure the loan. This can be done by way of making a charge against the asset financed by the Bank. The type of charge created depends on the character of loan, and the security (Fan, 2005).

Banks may also secure loans on other assets including fixed assets such as land and building or non fixed assets such as motor vehicles or household items.

Once a Bank secures its loans with proper security, the likelihood of default is reduced, and in case of default, the loss is lesser than otherwise (Kealhofer, 2003). Collateral is used to protect the bank against loss from a credit event. In the case of a counterparty default, the proceeds from liquidating collateral can be used to offset exposure from the underlying transaction. The legal agreements in place, which must be signed by each counterparty (or participants) before any transactions occurs are used to ensure that the Bank obtains a valid, first priority security interest in the pledged collateral.

The collateral frameworks of the bank have been enhanced from time to time, in keeping with good market practice and their own business requirements .With the inclusion of securities, the need arose for a transparent mechanism to establish the credit worthiness of collateral so that pledgers understand ahead of time which securities can be pledged as collateral in the Banks and how they will be valued (Kealhofer, 2003).

According to Amyx,(2005) the Bank establishes the list of assets acceptable for pledging as collateral and provides valuations of pledged securities. The latter are valued on a daily basis at current market prices less appropriate haircut to protect the bank against unexpected fluctuations in their market value. The Bank determines the appropriate haircuts based on its own analysis of the market and the liquidity risk of the securities in question. When using a collateral loan, you give the bank the right to take your asset if you can't repay. The assets one can use as collateral are: Automobiles, Real estate, Cash

accounts, Investments, Insurance policies, Valuables and collectibles, Future payments. Collateral is an item of value that is pledged to guarantee repayment of a loan. Collateral items are generally of significant value—property and equipment are often used as collateral, for example—but the range varies considerably, depending on the lending institution and variables in the borrower's situation. The value of collateral is not based on the market value. It is discounted to take into account the value that would be lost if the assets had to be liquidated in order to pay off the bank loan.

A business that has a long history of profitable operations may be able to obtain an unsecured loan, a loan without collateral. A new or a small business wishing to expand is almost always going to be asked to secure a loan with collateral. Unlike unsecured loans, in which a borrower is able to get a loan solely on the strength of its credit reputation, secured loans require borrowing companies to put up at least a portion of their assets as additional assurance that the loan will be repaid. Failure to repay the loan and the bank takes the items identified as collateral. Many start-up businesses turn to collateral-based loans to get their start (Fan, 2005).

2.4 Effects of Business Management and Business Experience on Credit Risk Management by Equity Bank Thika

According to Kenya National Bureau of Statistics (2007), three out of five small business businesses fail within the first few months of operation. One of the most

significant challenges is the negative perception towards SMEs. Potential clients perceive small businesses as lacking the ability to provide quality services and are unable to satisfy more than one critical project simultaneously. Often larger companies are selected and given business for their clout in the industry and name recognition alone.

Starting and operating a small business includes a possibility of success as well as failure. Because of their small size, a simple management mistake is likely to lead to sure death of a small enterprise hence no opportunity to learn from its past mistakes. A business that has been in operation for long has fewer chances of collapsing. This is because the proprietors have enough experience and a better understanding of the market. Therefore a Bank would feel more comfortable financing a business that has been in operation for long than one that is less than one year old ,(Amyx ,2005).

A proprietor who has business management skills stands a better chance of succeeding than one without business management skills. A proprietor with management skills will have better organisation skills and will offer direction unlike one without management skills. It is well established in finance theory that credit markets characterised with high asymmetric information, notably the existence of moral hazards and severe distortion and sometimes complete collapse of the formal credit market. Financial contracts will not be written under this condition hence; goods and services will be under produced and under consumed. The contracts between borrower and lender will only be honoured if the element of trust exists in such transactions. Commercial banks distrust poor people for credit because they cannot enforce payments without a presence of loan/physical

\collateral. Informational problems arise as banks fail to distinguish “good “among “bad “borrowers due to the poor accounting report of their business. It has been recognised however that non market institutions play the role in the overcoming such informational and enforcement problems (Kealhofer, 2003).

2.5 How Credit Rating Influence Credit Risk Management for Micro and Medium Loans by Equity Bank Thika

A credit rating estimates the credit worthiness of an individual, corporation, or even a country. Credit ratings are calculated from financial history and current assets and liabilities. Typically, a credit rating tells a lender or investor the probability of the subject being able to pay back a loan. A poor credit rating indicates a high risk of defaulting on a loan, and thus leads to high interest rates or the refusal of a loan by the creditor ,(Dullmann and Trapp, 2004).

Credit ratings published by the major rating agencies offer important benefits to market participants .They provide a commonly recognized source of independent opinions on credit worthiness, which can serve as a useful starting point for assessing the credit quality of counterparties and their financial instruments .In selecting which rating agencies to use, the Bank adhere to market practice by using agencies that are widely accepted by private investors in the relevant markets and that have been recognized by the regulators of those markets.

The number of external credit ratings used depends on rating availability .In most cases a minimum of two ratings would be conducted and when the rating agencies post different

ratings, the credit quality grade is usually based on the second highest rating. Since credit ratings change periodically, they are continuously monitored, and exposure limits are updated accordingly (Roe, 1982).

A lower credit score could impact various areas in someone's life. These are: difficulty or inability to get credit in the future, possible unprovoked cancellation of existing credit cards, difficult securing a lease on a house or apartment and challenges getting certain jobs as many employees are now doing credit checks. A loan default is when you have not made your agreed upon loan repayments to the lender. There can be a number of reasons why a consumer may not have made payments but once a certain period of time has elapsed, that nonpayment record will become a part of the consumer's credit history. Once it becomes a part of the credit history (or credit record) it is available to be used during the formulation of the consumer's credit score. One of the most common loans where default happens is with credit cards, (Amyx, 2005).

Default signifies to the lender that there is a far deeper problem with the consumer's finances. Once a default is posted to a consumer's record or credit history it stays on file for up to seven years. Because of this long period of time, it is important for all consumers to avoid defaulting on a loan whenever it is possible. One of the best ways to reduce the possible repercussions of a default is to contact the lender as soon as possible. If you are looking at missing just one or two payments, the lender may be able (and willing) to work some type of payment plan out with the financier. Most lenders are

willing to do this because it is easier and more cost effective to work with a consumer than it is to foreclosure on a home or repossess a car (Joy,2007).

The impact on score depends on how long the borrower was delinquent, how great a loss the lender took, state laws and other factors. The delinquent payments would be reported to the credit reporting agencies .In addition the lender may be able to go after other assets and income after the foreclosure if the state in which the property is located allows for deficiency judgments while obtaining a loan modification may seem like the best way to protect your credit rating, the way your lender reports your loan modification will determine the effect on credit score. If a customer is reported as being thirty days past due or classified as a “partial payment “it can show up as a negative mark on your credit report. A partial payment score can lower a consumer’s score by over fifty points (Crouhy et al,2000).

2.6 Effects of Recovery on Credit Risk Management by Equity Bank Thika

Financial institutions at present experience considerable difficulties in recovering loans and enforcement of securities charged with them. The existing procedure for recovery of debts due to banks has blocked a significant portion of their funds in unproductive assets, the value of which deteriorates with the passage of time (Deng et al,2000).

It is important to remember that recovery management, be of fresh loans or old loans, is central to Non-Performing Assets management. This management process needs to start at the loan initiating stage itself. Effective management of recovery and Non-Performing

Assets comprise two pronged strategy. First relates to arresting of the defaults and creation of NPA thereof and the second is to handling of loan delinquencies (Fan ,2005).

An organization that use hard recovery methods like impounding stands a lesser chance of default because the clients would fear to face the repercussions that come hand in hand with being impounded. This is unlike for financial institutions that are soft on recovery because at the back of the mind of their clients, they know the bank would be lenient with them even if they defaulted. Repayment default is broadly defined to include payment in arrears and repayment evasion. An efficiently managed loan scheme will both maintain administrative costs at reasonably low levels and minimize the extent of repayment default (Bharath & Shumway, 2005).

The problem of high repayment default may be less tractable. A wide range of measures to reduce the repayment default are available for use in various loan schemes. These include the use of loan guarantors, loan suasion,(publication of defaulters lists),barring access to further credit if in default and legal action against recalcitrant defaulters. However, it is frequently the case that these measures are not employed in practice. In a number of cases, notably in developing countries, a general atmosphere of non compliance has been created in which non repayment has become to be regarded as socially acceptable. A subject of recent controversy is whether the type of repayment collection mechanism in place can affect the level of repayment default. Specifically it is argued strongly that income contingent repayment schemes are likely to ease the problem of repayment default, since an excessive repayment burden is avoided during periods of

unemployment and low earnings. However whatever the other merits of income contingent repayment and traditional mortgage schemes, there is no evidence from the present study that default is lower under income contingent schemes than mortgage type schemes (Joy,2007).

2.7 Theoretical framework

Berger (1991), propose that adjustments to risk-based capital specifically for loan default disclosure would increase the accuracy of capital adequacy requirements. In theory, credit losses and the related loan default disclosures would correlate with the bank's capital requirements to enrich the understanding of inherent risk. In the capacity of a proxy for risk, loan default information could prove useful in the prediction of bank soundness.

Theoretically, information about post-contract default risk commensurate with loans would be expected to provide information for assessment of at a minimum a bank's credit risk and subsequently assist in assessment of overall financial health. More specifically, loan default measures provide loss of information in the form of evidence about a bank's willingness and ability to deal with loan default problems, which essentially represents a banks' involvement in credit risk management and indirectly relates to operational risk. The occurrence of risk relates to post-contracting events, where a debtor's repayment is less than the contract amount and is contingent on unknown, unfavorable and uncontrollable outcomes.

The resulting risk relates not only to individual credit loan risk, but also affords evidence of management's attitudes toward risk. Reported loan default disclosures that contain differing levels of discretion include non-accruing loans, past due loans, loan loss reserves, loan loss provisions and net loan charge-offs. Milne (2002) supports the idea of discretion, indicating that management has both the incentive and capacity to control loan portfolio risk. In any given time period, managers have discretion in both the amount charged for loan loss provisions and the amount of loans written off. In comparison, managers possess relatively limited discretion to affect the level of non-performing loans.

2.8 Conceptual framework

A conceptual framework is a model of presentation where a researcher conceptualizes or represents the relationships between variables in the study and shows the relationship graphically or diagrammatically. It can also be defined as a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. In this context a conceptual framework is a hypothesized model identifying the concepts or variables under study and showing their relationships (Orodho, 2010).

Figure.1 shows the conceptual model which encompasses the major variables and their possible patterns of influence on each other as shown.

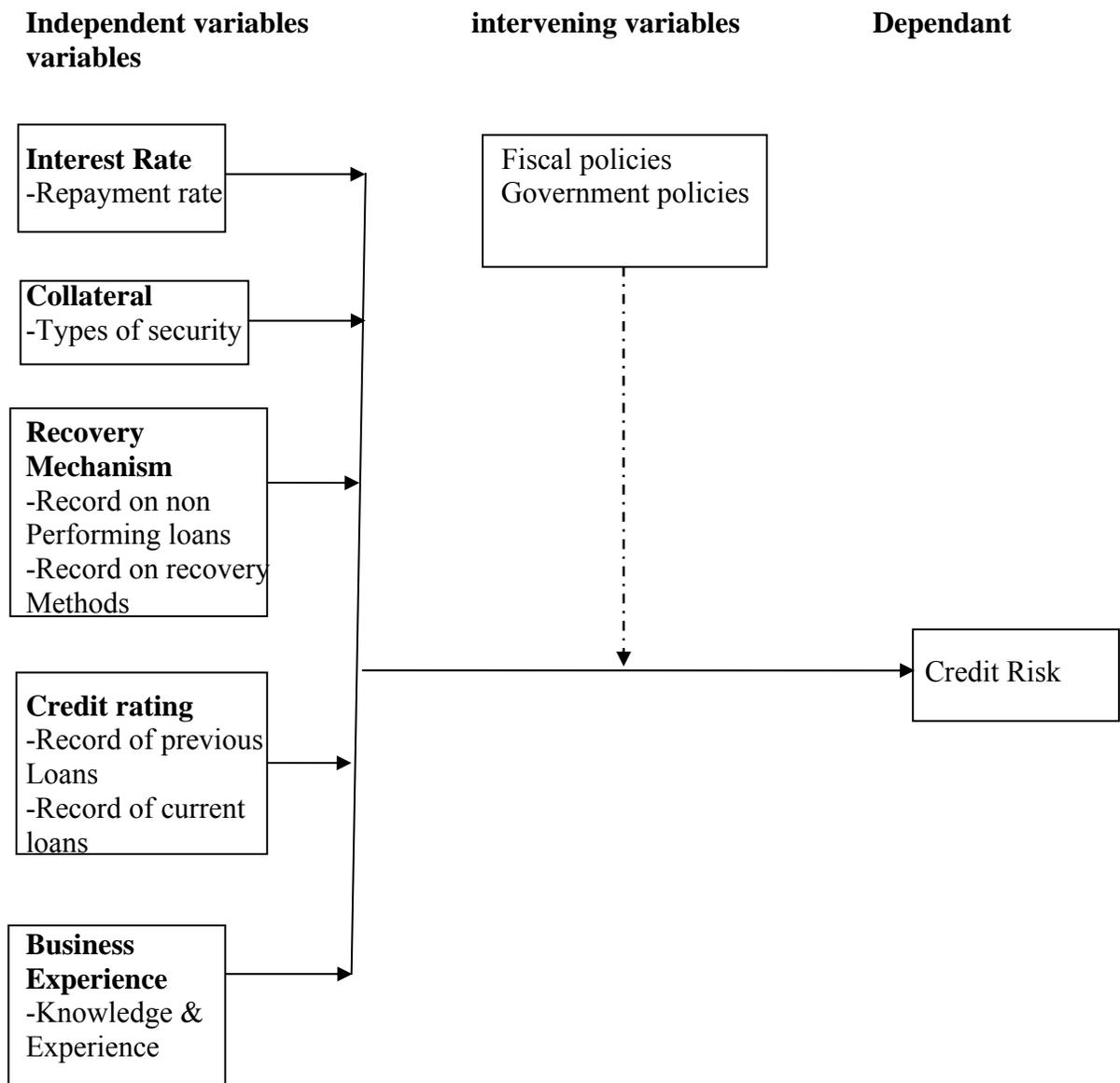


Fig1: Conceptual Framework

High interest rates would lead to high chance of default because the loan would end up being more expensive and hence the clients might not be to repay. Clients who pledge tangible assets are less likely to default as compared with those who pledge intangible assets, in addition, if a loan is secured against tangible assets, the institution may dispose it in case of default thus reducing the risk of loss. Financial institutions which use hard recovery methods like impounding are likely to experience low rate of default and vice versa. Clients with a good credit scoring are less likely to default as compared to those with a poor credit scoring. Clients with business experience are less likely to default as compared to those with new entrants into business.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains how the research was carried out. It outlines the research design, target population, sample and sampling techniques, research instruments, validity and reliability of the research instruments, data collection procedures and data analysis techniques

3.2 Research Design

A research design can be regarded as an arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance with the research purpose (Kothari, 2003). The study employed a descriptive research design, and sought to explain or describe the activities under review (Dillman, 2000). Kombo and Tromp, (2006) stated that a descriptive study is a method of collecting information by interviewing or administering questionnaires to a sample of individuals. It can be used to collect information about people's attitude, opinions or habits. Mugenda & Mugenda (2003) described a descriptive study design as the best method for social scientists in collecting original data for the purpose of describing a population which is too large to observe directly hence the choice for design. The research intended to find out from members of the population their views on one or more variables.

3.3 Target Population

According to Mugenda (2003), a population is a complete set of individuals, cases or objects with some common observable characteristics while target population refers to

that population to which a researcher wants to generalize the results of a study. The target population was all the customers who had micro business loans with Equity bank Thika branch. According to the records, 5,200 customers fell in this category.

3.4 Sample size and Sampling Procedure

A sample is the group of elements or units picked to represent the general population from which it is picked. The findings from the sample were then generalized to the entire population.

3.4.1 Sample size

A scientific calculator obtained from www.nss.gov.au was used to determine the appropriate sample size. At 95% confidence level and an error of estimate of 0.05 and assuming a probability of delinquency of 0.03 a sample of 80 was considered adequate. The sample was distributed in the customers' category according to their proportion as shown in the Table 3.1.

Table 3.1: Sampling Frame and Proportionate Sample Size per Stratum

TARGET GROUP	TOTAL POPULATION	STRATIFIED SAMPLE
Transport	1,463	22
General retail	2,964	46
Real estate	362	6
Hospitality	411	6
TOTAL	5,200	80

3.4.2 Sampling

Sampling is a process of selecting the number of individual from a population such that the selected group contains elements representative of the characteristic found in the entire group (Orodho, 2000). The larger the population, the more it is likely to be heterogeneous. To achieve accurate results, a larger sample is required in a heterogeneous than in a homogeneous domain (Ebel, 1991). A larger sample will always yield sample statistics closer to the population parameter than a more limited sample (Robson, 1996). While using the sample instead of the total population, the research becomes cheaper and easier to carry out Orodho, (2005). The researcher applied the conclusion drawn from the sample to the target population. In order to achieve this, a representative sample was drawn. A random sample is deemed to be representative of the population. Random sampling is a scientific method of sampling where every element has equal chances of being selected (Mugenda, 2003).

The study employed stratified random sampling technique. All clients who had borrowed micro and medium loans were classified in to four stratus based on different sectors or business activities. i.e general trading, transport, real estate and Hospitality. The idea was to ascertain if clients are indifferent in terms of credit risk in different sector. From each stratum a sample was selected by simple random sampling as demonstrated in the table 1. Four Credit relationship officers were selected purposively corresponding with each stratum. The officers were interviewed to provide in-depth information on the credit risk of each stratum.

3.5 Data Collection methods

The main data collection method was self administered questionnaires with both open ended questions and closed ended questions. According to Mugenda (2003), questionnaires are commonly used to obtain information about a population under study. The researcher used questionnaires because respondents' confidentiality was upheld and since they were represented in a paper format, there was no opportunity for an interviewer's bias.

In addition, interviews were also carried out on the four bank credit officers, the credit manager was also considered for interview to give a general overview of the operation.

Document review involving analysis of existing records from the bank was also done.

3.6 Validity and reliability of the Research Instruments

Use of research instrument to collect data is on the premise that the instruments used are valid and reliable therefore the data collected will have both validity and reliability to represent the population from which it is drawn.

3.6.1 Validity of the instruments

Validity is concerned with the accuracy in which the items generated measures what it is purposed to measure (Orodho, 2005). To enhance the face validity of the instrument, the questionnaire was reviewed by some of my colleagues and my university supervisor, on relevance of the questions to the topic under study. To ensure content validity, the instrument was designed according to the study variables and their respective indicators

of measurement. Construct validity was maintained through restricting the questions to the conceptualization of the variables and ensuring that the indicators of a particular variable fall within the same construct.

3.6.2 Reliability of the research instruments

According to Mugenda & Mugenda (2003) the reliability of an instrument is the measure of the degree to which a research instrument yields consistent results or data after repeated trials. After the draft of the prototype questionnaire was complete, it was pretested on a small representative sample of the population. The pretest was a try-out of the questionnaire to see how it works and whether changes were necessary before the start of the actual study. About 5 to 10 respondents were adequate for a pretest (Orodho, 2005).

3.7 Data Collection Procedure

During the main study permission was sought from the Bank Branch Manager to collect data. A random sample of customers was given questionnaires as per the sampling frame in Table 3.1. The selected customers were visited and requested to fill the questionnaires. In addition, the bank officials were interviewed on a pre-arranged time when it was convenient for them. The officials were also requested to avail as much secondary information as was deemed relevant.

3.8 Data Analysis

The data collected was both quantitative and qualitative. Descriptive methods were employed in analyzing qualitative data where frequencies and proportions were used in interpreting the respondent's perception of issues raised in the questionnaires so as to answer the research questions. Tables, graphs and charts were used in data presentation.

During the analysis raw data was collected, sorted, edited, and coded. The open-ended questions were manually analyzed by grouping responses into similar themes and tallying them and frequencies determined using excel spreadsheet. The closed-ended questions were appropriately labeled and entered into the statistical package for social sciences software (SPSS).

Descriptive statistics such as frequency and mean were used to analyze data collected with the aim of generalizing to the whole population.

3.9 Ethical Issues

The Researcher complied with the following principles which aimed at protecting the dignity and privacy of every individual who, was involved in the Research study, and provided personal or commercially valuable information about themselves or others (hereinafter referred to as a subject of research).

Before an individual became a respondent, he/she was notified of the aims, methods and anticipated benefits of the research; his/her right to abstain from participation in the research and his/her right to terminate at any time his/her participation, and the confidential nature of his/her replies.

No individual became a subject of research unless he/she was given the notice referred to in the preceding paragraph and provided a freely given consent that he/she had agreed to participate. No pressure or inducement of any kind was applied to encourage an individual to become the subject of research.

3.10 Operationalization of Variables

The Table 3.2 presents operationalization of variable which was used to define the type of information required for each variable and how / where the information was obtained.

Table 3.2: Operationalization of Variables

Objective	Type of Information	Data Collection instrument	Measurement scale	Analysis Technique
To establish the influence of interest rates on credit risk management of Micro and medium enterprise loans in equity bank	Interest rate on different times Repayment rate corresponding to different interest rates	Customers record	Ratio	Comparison of percentages
To establish the influence of collaterals on credit risk management of Micro and medium enterprise loans in equity bank.	Type of security for the loans Comparison of default rate with type of security	Customers records	Ratio	Ration of default for loans with different securities
To establish the influence of business knowledge and experience in credit risk management of Micro and medium enterprise loans in equity bank.	Knowledge and experience of borrower	Questionnaires	Ordinal	Comparison of different customers with different knowledge/experience
To establish the influence of credit rating in credit risk management of Micro and medium enterprise loans in equity bank.	Record on previous loan repayment Record of current payment	CRB record Bank Records Questionnaire	Ratio/ ordinal	Comparison of repayment for different loans
To establish the influence of recovery mechanism in credit risk management of Micro and medium enterprise loans in equity bank.	Record on non performing loans Record of recovery methods used	Bank records	Ratio	Comparison of different loans

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents analysis, presentation and interpretation of data collected from the field. The collected data is first sorted and then analyzed according to the research objectives. Qualitative data is coded and analyzed using SPSS while quantitative data is analyzed using Microsoft Excel. Data is presented in form of Frequency tables and charts which are then interpreted to help answer the research questions.

4.2 Response Rate

The response rate for the questionnaires was 100%

4.3 General information

There was need for the researcher to know the general information about the respondent. This information included gender of the respondent, level of education and time he or she has been using banking services.

4.3.1 Gender of the respondent

The researcher assessed to find out the gender of the respondent; this is because gender affects the way people behave and perception of risk. The findings were presented in Table 4.1 .

Table 4.1: Gender of Respondents

Gender	Frequency	Percentage
Female	50	62
Male	30	38
Totals	80	100

The findings revealed that 62 % of the respondents were female while 38 % were male. This shows a gender imbalance with women being the most beneficiary of the micro credits. This may be explained from the fact that more females engage in small and medium businesses which are not fully established as opposed to their male counterparts.

4.3.2 Period of using banking services.

The researcher sought to establish time and period the respondent has been using banking services. This is a demographic feature that affects behaviors or perception of respondents. It was important to assess the period and time one has been enjoying the services offered by the bank so as to identify how one was conversant to the organization. Beside it was also important to study customers' history so as to assess his/her credit worthiness. The collected data was presented in Table 4.2.

Table 4.2: Responses on Period of Using Banking Services

Age	Frequency	Percentage
0-5 years	50	63
6-10 years	13	16
11-15 years	10	13
16-20 years	5	6
Over 20 years	2	2
Total	80	100

The findings showed that 63 %t had enjoyed banking services for a period less than 5yrs, 16 % of the respondents had used banking services for a period between 6-10 yrs, 13 % had used the services for a period of between 11-15 years, six percent had used the service for between 16-20 years, and two percent of the respondents had over 20 yrs using the bank. This indicates that majority of the respondents had enjoyed the services of the bank for less than 5yrs. This means they were relatively new in banking; they lack credit history but have emprise taking credit from financial institution to boost their business.

4.3.3 Level of Education

The level of education is a very important aspect. It affects some contributing factors to credit risk management. They include business knowledge, understanding of credit rating and understanding legal frame among others. It helps in understanding if the respondent can answer the questionnaires objectively.

Table 4.3: Respondents Level of Education

Education level	Frequency	Percentage
Primary education& below	14	18
O' level	54	68
Certificate	10	12
Degree	2	2
Total	80	100

It was found out that 18 % had not attained secondary education, 68 % had O' level of education, 12 % had post "O" certificate and only two percent were degree holders. The results show that majority of the respondents were well educated. This implies that most of the respondents do are able to read and understand English thus able to respond objectively. These results are tabulated in Table 4.3 above.

4.4 To Establish How Interest Rates Affect Credit Risk Management.

The researcher sought to find out the business profitability of customers who had taken up micro credit loans in order to ascertain ability to repay the loan based on business income.

Table 4.4: Responses on Customers Profit before Charging Interest

Profit Before Paying interest In Percentage	No-of Customers	Percentage	%Cum Frequency
Loss	2	3	3
0- 10	5	6	9
11- 20	8	10	19
21-30	34	42	61
Above 30	31	39	100
	80	100	

Through questionnaires, customers were asked to state their profit before paying interest on loans. It was found out that Three percent of the customers were making loss, Six percent were making a profit of less than 10 %, ten percent of the customers had between 11% and 20 %, 42 % of the customers were making between 21% and 30 % while 39 % had profit of above 30 %. This scenario is tabulated in Table 4.4.

The findings further indicated that 19 % of the customers will not be able to service their loans from the business profit if interest reaches 20 %.

The researcher therefore sought to find out the interest rates paid by most of the customers. Customers were asked the interest rates they were charged on the loans they were repaying at the time of application.

Table 4.5: Responses on Interest Rate on Loan at the Time of Application

Interest rate	No- of customers	Percentage
18%	53	66
20%	20	25
24%	7	9
	80	100

It was found out that 66 % of the customers had applied for the loans when the interest rates were 18 %, 25 % applied when the loans were 20 % while only seven percent had applied when the loans were at 24 %. The results which are tabulated on Table 4.5 above showed that most of the applicants had applied when loans were at 18%. As the interest went up, loan applications decreased as customer feared that they may not be able to break even.

The researcher further sought to find out if micro credit customers were able to make their repayment in time.

Table 4.6: Responses on Loan Repayment Timing

	Number of customers	Percentage
Payment in Time	49	61
Late Payment	31	39
Total	80	100

It was found out that 61% of customers are able to repay the loan in time while 39% were not able to pay in time. The number of those who were late in making installment repayment closely agrees with those whose profit is not able to absorb interest rate on the loans they are paying.

It was important to assess the relation between the interest rates and repayment rates.

Table 4.7: Responses on Relation between Interest Rates and Business Margin

	Interest Rates in Percentage		
Interest Rates in Percentage	18	20	24
Repayment rate in Percentage	98	96	95
Portfolio at risk in Percentage	2	4	5

Information on different interest rates and the corresponding portfolio at risk obtained from the bank records was analyzed as shown in the table above. From the records available three scenarios were analyzed corresponding to various interest rates. The Portfolio at risk for these scenario showed that when the interest rate was at 18%, the loan performance was at 98% meaning Portfolio at risk was only 2%. As the interest rate increased, the rate of delinquency went up. When interest rate was 20 %, portfolio at risk was four percent .When interest rate went further up at 24%, the portfolio at risk rose to five percent meaning that loan performance rate was 95%. These findings were presented in Table 4.7.

The above scenario corresponds with the findings by Rittenburg (1991) who argued that high interest rates can be detrimental to investment and growth. In table 6 above the researcher found out that 19% of the customers will not be able to make any profit if interest rate reaches 20%. If interest exceeds 20% as was the case in one scenario when it went as high as 24%, many customers were not able to service their loans from the business. This could partly be the reasons why 39% of the customers were unable to make their repayment in time. Similarly, Table 4.7 shows that as interest rates increased, borrowers are discouraged from borrowing and this may slow down investment and growth.

4.5 The Relationship between Collaterals and Credit Risk

It was important to know whether the nature of collaterals placed against loan facilities played a role in managing credit risk. This was investigated by analyzing the questionnaires and the results tabulated in Table 4.8.

Table 4.8: Responses on Types of Collateral Used to Secure Loans

Type of Collateral	Number of customers	Percentage
Fixed Asset	39	49
Movable assets	26	33
Household goods	10	12
Stock	5	6
Total	80	100

The research established that all the loans given had collateral. Various types of collateral were used for the micro loans. Most of the Micro and medium loans used household

goods comprising 49% of all loans given. Household goods comprised of items such as furniture, electronics and kitchen wares. Business stock was also included in this category. Movable Assets comprising mainly motor vehicles and motor cycles comprised 33% security of the loans given while fixed assets constituted 12%. Stocks (shares) comprised six percent of security of all loans. These were the shares of companies listed in Nairobi stock exchange. These findings are summarized in Table 4.8.

Customers' perceptions toward adequacy of security is another an important determinant of default. If customers perceive security to be too low then they are more likely to default than if security was high or had sentimental value. Table 4.9 below summarized customers perception toward collateral used for their loans.

Table 4.9: Responses on Customers Perception on Adequacy of Security

Customers feeling on security	Number of customers	Percentage
Adequate	55	69
Too high	22	28
Inadequate	2	3
Total	80	100

The researcher found out that 69% of the customers felt that the security given for the loans was adequate. On the other hand 28% of the customers felt that the security given was too high compared to the loans given while only three percent felt that security given was inadequate compared to the loans given.

Analysis of records from the banks on the nature of collateral showed that of all loans written off, the security given was inadequate. Where the loans had been nonperforming and the security given was adequate, the bank took lien of the security charged and disposed them to recover their money. This is in support of the argument by Kealhofer,(2003) that once a Bank secures its loans with proper security, the likelihood of default is reduced, and in case of default, the loss is lesser than otherwise.

4.6 How Business Experience Influence Credit Risk Management.

The researcher sought to establish whether business experience influence credit risk. This was done by assessing the number of years a customer has been in the current business before applying for the loan and comparing it with the rate of delinquency. Table 4.3 above had indicated that most of the respondents were educated with 87.5 having secondary and post secondary education.

Table 4.10: Responses on Customers Number of Years in Business

No- of years in business	Frequency	Percentage
Less than 1 year	6	8
1-5 years	24	30
6-10years	32	40
Over 10 years	18	22
Totals	80	100

The researcher found out that eight percent of the customers with loan have less than one year of experience, 30% had between one and five years, 40% had between six and ten years while 22% had more than ten years experience. This shows a tendency of the bank to give loans to customers who have been in business longer as they are more established and less likely to default. These findings are summarized in Table 4.10.

A relationship between business experience and the delinquency rate is summarized in Table 4.11 and Table 4.12 below.

Table 4.11: Responses on How Business Experience Influence Credit Risk Management

Account status	Frequency	Business experience			
		< 1 yr	1-5 yr	6-10yrs	>10yrs
Performing	67	3	16	30	18
Non performing	10	2	6	2	-
To be written off	3	1	2	-	-
Total	80	6	24	32	18

Information concerning these customers was sought from the bank. Table 4.12 set out the relationship between default and the year of business experience at which the customer was given out.

Table 4.12: Matrix of Relationship between Year of Experience and Default

Account status	Business experience				
		< 1 yr	1-5 yr	6-10yrs	>10yrs
Performing in percentage	83.75	3.75	20	37.5	22.5
Non performing in percentage	12.5	2.5	7.5	2.5	-
To be written off in percentage	3.75	1.25	2.5	-	-
Total	100	7.5	30	40	22.5

The same matrix is converted into percentage in Table 4.12 above. From the matrix, it is clear that 3.75% of the loans were written off. All these loans written off were loans advanced to customers who had less than 5 years of experience.

4.7 How credit rating influence credit risk management

Credit ratings are calculated from financial history and current assets and liabilities. To assess the financial history, the researcher sought to find out the customers who had previous loans and their repayment history.

Table 4.13: Responses on Customers Borrowing History

Customer History	Customers	Percentage
First loan	31	39
Repeat loan	49	61
Total	80	100

It was found out that 61% of the customers had previous loans and therefore their credit rating could be based on their repayment history. On the other hand 39% of the customers had not had any previous loans and therefore assessing their repayment history was difficult. These findings are represented in Table 4.13.

The credit rating of customers who did not have repayment history was assessed using their Banking history and their net worth (Total Asset- Total Liability). At the time of getting the loans, all customers had more assets than liabilities.

Table 4.14: Responses on Relationship between Loan Repayment and Credit Worth

Nature of loan	Customers with loans	With difficulty paying current	Percentage of customers with difficulties
First loan	31	15	48
Repeat loan(clean repayment history)	36	7	19
Repeat customers with difficulties	13	9	69
Total	80	31	

An assessment of customers with credit history was done by analyzing the results of the 49 customers who had credit history. It was found out that 69% of the customers who had difficulties paying previous loans also had difficulties repaying the current loans. Similarly 48% of the customers who had no credit history had difficulties repaying the

current loans while only 19% of the customers with clean repayment history had difficulties paying the current loan. The results are tabulated in Table 4.14 above.

4.7 Effects of Recovery Mechanism on Credit Risk Management

Recovery process needs to start at the loan initiating stage itself. When the loan is being processed, it must be clear how recovery mechanism will be done in the event of default.

Table 4.15: Responses on How Legal Framework Influence Credit Risk Management

Account status	Sample size	Legal action taken	No action taken.	legal Paid after
Performing	67	0	67	0
Non performing	10	6	4	5
Written off	3	0	3	0
Total	80	6	74	5

The records available from the bank records showed that it was not possible to institute successful legal action on all the 3 customers who defaulted. It was established that the items charged could not be confiscated as there were irregularities. These loans had to be written off. Of the non performing loans, 5 customers out of ten (50%) paid after legal action was taken. Legal actions taken on nonperforming loans included confiscating charged assets and selling them to recover the loan balances. These findings are summarized in Table 4.15 above.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of findings, discussion, conclusions and recommendations. The chapter concludes with a recommendation for further study on enhancing credit risk management.

5.2 Summary of the Findings

The study aimed at investigating and analyzing factors influencing credit risk management in equity bank Thika branch. Primary data in which a sample of 80 customers randomly selected was used in this analysis. Data was analyzed by descriptive frequencies (frequency Tables).

The research established that 62 % of customers were female compared to 38% who were male. It was also found that 63% percent of the customers with Micro credit loans had 0-5 years of banking with the bank and 83 % of the customers had attained form four education or post form four education.

5.2.1 Influence of Interest Rate on Credit risk Management of Micro and Medium Enterprise Loans in Equity Bank Thika

Although the interest rates ranged from 18% and 24%, it was found that 19% of the customers made less than 20% profit before factoring interest. Of the customers with micro loans, 42% made 21% and 30% profit before charging interest. Only 39% of the customers with micro credit loans made more than 30% profit before charging interest. The research also found out that as the interest rate went up; the portfolio at risk went up. Various types of collaterals were used.

5.2.2 Influence of Collateral on Credit Risk Management of Micro and Medium Enterprise loans in Equity Bank Thika

The study found out that 49% of the respondents used household goods and business stock, 33% of the respondents used movable assets, 12% used movable assets while six percent used shares. Where customers felt that security used was adequate, the rate of default was low.

5.2.3 Influence of Business Knowledge and Experience on Credit Risk Management of Micro and Medium Enterprise Loans in Equity Bank Thika

The research further found out that eight percent of the respondents had less than one year of experience in business by the time they were given loans, 30% of the respondents had between 1 and 5 years experience by the time they got the loans, 40% had between 6 and 10 years while 22 % had more than 10 years of experience by the time they were borrowing. Most of the non performing loans were for those customers who had less experience at the time of borrowing.

5.2.4 Influence of Credit Rating on Credit Risk Management of Micro and Medium Enterprise Loans in Equity Bank Thika

Analysis of the respondents showed that 39% were first time borrowers therefore lacked credit history while 61% were repeat borrowers therefore had a credit history. Of the first time borrowers 48 % had difficulties repaying. Of the repeat borrowers who had a good credit history, only 19% had difficulties in repaying while 69% of the repeat borrowers who had a poor credit history had difficulties in repaying the current loans. Therefore customers with a good credit history were less likely to default.

5.2.5 Influence of Recovery Mechanism on Credit Risk Management of Micro and Medium Enterprise loans In Equity Bank Thika

It was found out that 50% of non performing customers paid after legal action was instituted. It was further found out that it was not possible to institute legal action on all the customers whose loans were written off.

5.3 Discussions of Findings

The research established that more women borrow micro and medium enterprise loans compared to men. This could be explained by the fact that women lack strong collaterals such as land and building as most of these are owned by men. In addition, mostly women in this region venture in small and medium enterprises. Most of the respondents had attained “O” level education and therefore could easily understand and answer the questionnaires. These customers could also easily be trained. Most of the micro and

medium loans are also relatively new with 62% having being customers for at less than five years. This can be explained by the fact that the bank customers are growing very fast.

The research found out that interest rate affect repayment ability and consequently default rate. As the interest rate is raised, default rate goes up and therefore credit risk increases. This could be because interest is an expense and increase in interest reduces profitability and hence the ability to repay.

Use of security is another important determinant of repayment rates. When adequate security is used rate of default goes low and consequently the risk also goes down. When adequate security is used, in the event of a customer default, the financial institution can lift lein of the security and sell it to recover the amount loaned.

The research also established that the bank had advanced more credits to customers with between 5 and 10 years since these customers had more experience in business, however the number of customers with more than 10 years experience was less. This may be because business of such customers had stabilized and their loan requirement may be few. In addition, such customers may have benefited from other loan products. Customers with more experience in business are less risky to lend to than customers with little or no experience. When customers have experience in business, they understand it better and the likelihood of business collapsing are lower than for customers with no experience. If a business collapse, rate of default are very high and credit risk is high.

Customer's credit rating is done using a number of methods which include credit history, customer's net worth and viability of customers business. A good credit rating reduces credit risk. Customers with a good repayment history are less risky to default than customers with poor credit history.

Having a good recovery mechanism is another key factor that reduces credit risk. Most non performing loans can be repaid if customers are subjected to stringent recovery mechanism which may include legal action. When recovery mechanism is planned before the loans are given, recovery proved to be good since if customers fail to repay, their properties may be impounded.

5.4 Conclusions of the Study

Financial institutions have a role to safeguard investors' asset by reducing risk. The biggest risk to financial institution is the credit risk. However credit risks can be adequately mitigated by ensuring that interest rate charged are reasonable to enable customers afford repayment. The institutions should also charge adequate security to motivate customers to repay or in event of default enable the institution sell the asset and recover their money in full. Customers with business experience are less risky than customers who want to start up new businesses or customers with less experience. A proper customer appraisal is key in reducing credit risk. Customers with poor credit rating are more risky than customers with a good repayment history. A stringent and well planned recovery mechanism also reduces credit risk since in the event of default, the institutions will take necessary action to recover their money.

5.5 Recommendations of the Study

In order to reduce credit risk and safeguard the assets of lending institutions, the following recommendations are made:

5.5.1 Influence of Interest rate on Credit Risk Management on Micro and Medium Enterprise loans in Equity Bank Thika

Lending institutions should carry out a comprehensive market survey to identify an interest rate commensurate with the prevailing business environment. The interest rate should not be too high. Lending institutions should avoid raising interest rates on existing loans.

5.5.2 Influence of Collateral on Credit Risk Management of Micro and Medium Enterprise loans in Equity Bank Thika

Lending institutions should also ensure that the loans are adequately secured. This will safeguard the assets of the institutions since in case of default; security will be sold to recover the amount loaned.

5.5.3 Influence of Business Knowledge and Experience on Credit Risk Management of Micro and Medium Enterprise Loans in Equity Bank Thika

Generally lending institutions should be cautious in giving loans to people who lack business experience or without existing businesses.

5.5.4 Influence of Credit Rating on Credit Risk Management of Micro and Medium Enterprise Loans in Equity Bank Thika

Lending institutions should mitigate against lending to customers with a poor credit history. This could be by asking for tangible securities and perfecting them appropriately to secure the loans.

5.5.5 Influence of Recovery Mechanism on Credit Risk Management of Micro and Medium Enterprise Loans in Equity Bank Thika

Recovery mechanism should be planned and instituted promptly in the event of default.

5.5 Suggestions for Further Studies

The researcher noted a bias of micro and medium credit towards female borrowers. It is therefore important to research on the influence of gender on credit risk. To improve on this research, the researcher is also suggesting a study on the impact of high credit risk on performance of financial institutions.

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Appendix i: LETTER TO THE RESPONDENT

Dear respondent,

I am a student at Nairobi University pursuing a Masters degree in Project Management. In fulfillment of the university requirements, I am required to carry out a research on challenges in managing credit risk for micro and medium enterprises loans which will be based in equity bank, Thika branch.

I kindly request you to support me by offering the required information .Your cooperation and assistance will be highly appreciated. The information collected will be used to make recommendations for this research.

Let me take this opportunity to thank you in advance for taking part in this study.

Yours sincerely,

Joyce N. Munene

Appendix ii: QUESTIONNAIRE

Please do not write your name anywhere on this questionnaires. Information provided will be treated with utmost confidentiality. You are requested to read each question carefully and provide your honest response. Please tick (✓) on your appropriate response.

PART I

Personal Information

1. Gender

Male

Female

2. How long have you been using the bank services?

(a) 0-3 years

(b) 4-6 years

(c) 7-10 years

(d) over 10 years

(3). Indicate your academic qualification

(a) Primary

(b) Secondary

(c) College

(d) Informal

(4) What are your other sources of income?

a) Employment

b) Other business

c) Rental

d) Farming

e)

None

PART II

1. Influence of interest rates on business margin and credit risk management.

i) What is your current business profit margin before interest?

- A) Negative b) Between 0-10% c) 11-20% d) 21-30%
e) Above 30%

ii) What was the interest rate on the loan that you are currently paying at the time of application?

- a) 0-10% b) 11-20% c) 21-30% d) Above 30%

iii) Are you able to make monthly installment in time?

- Yes No

2. Role of collateral for micro and medium Enterprise loans

i) Is your loan secured by any collateral? Yes No

ii) If secured what type of collateral?

- a) Fixed assets b) Moveable assets c) Household goods d) Stock

iii) What are your views about the security given?

- a) Too much b) adequate c) Inadequate

3. Role of business knowledge or experience in credit risk management

i) How long have you been in the business for which you took the loan?

- a) Less than 1 year b) 1- 3 years c) 3-5 years d) Over 5 years

ii) What was the purpose of your current loan?

a) Business start up b) Business expansion c) Personal
development

d) Other uses

iii) Was the loan put to the purpose for which it was borrowed?

a) Yes No

4. Effects of credit rating on credit risk management

i) Have you ever taken up any other loan before the current loan?

Yes No

ii) If Yes, Did you repay within the allowed time?

Yes No

iii) Have you ever failed to repay any loan?

Yes No

5. General view and recommendations

i) Would you say that you have realized the expected benefit from the current loan?

Yes No

ii) In your own view, how would you comment about the loans from this bank?

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Appendix iii: INTERVIEW SCHEDULES

1. Collaterals

Kindly give the following information relating to collaterals on the micro and medium enterprise loans within your branch.

Account status	Loans with conventional collateral	Loans with No conventional collateral	Total no- of Loans
Number of performing accounts			
Number of non performing accounts			
Accounts written off			

2. Business Experience

Kindly give the number of customers with micro and medium loans in your branch and the time they have been in business before getting the loans

Account status	Less than 1 year	1-2 years	3-5 years	Above 5 years
Number of non performing accounts				
Number of performing accounts				
Accounts written off				

3. Credit rating

Kindly give the following details relating to customers credit rating using the following classification:-

A Grade customer:- A customer who has never defaulted in any financial institution

B Grade customer:- A customer whose loan has never gone into arrears for more than 30 days.

C Grade Customer:- A customer whose loan has gone into arrears of between 31 days to 90 days.

D Grade Customer:- A customer whose loan has fallen into arrears for more than 90 days.

Account status	A Grade	B Grade	C grade	D grade
Number of non performing accounts				
Number of performing accounts				
Accounts written off				