FACTORS INFLUENCING CREDIT RATIONING BY COMMERCIAL BANKS IN KENYA

CAROLYNE JEBIWOTT KIMUTAI

D53/PT/12430/2009

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION (FINANCE OPTION)

KENYATTA UNIVERSITY

MAY 2011
Kimutai, Carolyne
Factors influencing credit rationing by
DECLARATION

This research project is my original work and has not been presented for the purpose of a degree-course in any other university.

Carolyne Jebiwott Kimutai
D53/PT/12430/2009
Signature: Date: 26/5/2011

This research project has been submitted for examination with the approval of the university supervisors

Mr. F.S. Ndede
Lecturer, Accounting and Finance Department
Signature: Date: 27/5/2011

Ms. Farida Abdul
Lecturer, Accounting and Finance Department
Signature: Date: 10-06-2011

Mr. F.S. Ndede
Chairman, Accounting and Finance Department
School of Business, Kenyatta University
Signature: Date: 07-07-2011
DEDICATION

This work is dedicated to my beloved family my parents Elkana Changwony and Esther Changwony. Their passion for education has been a great source of strength and inspiration to me. To my Sisters Alice, Gladys, Ruth and to my brothers Daniel, David, Duncan, Peter and to my in laws, nephews and nieces.
ACKNOWLEDGEMENT

My gratitude goes to the almighty God who has given me the strength to complete this work. The preparation, compilation and completion of this work could not have been possible without the assistance of many people. I am immensely indebted to my supervisors, Mr. F.S.Ndede and Ms. Farida Abdul for their selfless, candid and valuable guidance during the whole process of producing this work. Their honest criticisms and suggestions were most appreciated.

More sincerely, I convey my heartfelt gratitude to my parents, sisters and brothers and to the entire family for their constant prayers and support.

Special thanks go to all those who in one way or another contributed to the successful completion of this work.

To all, May the Almighty God bless you abundantly.
ABSTRACT
Bank credit refers to loans and overdrafts extended to enterprises by formal banking institutions. Bank credit is among the most useful sources of finance for business in Kenya, the provision of credit has increasingly been regarded as an important tool for raising the incomes, mainly by mobilizing resources to more productive uses. As development takes place, one question that arises is the extent to which credit can be offered by commercial banks. Although Commercial banks have a primary role of providing credit, there is historical evidence of credit rationing even to creditworthy borrowers by commercial banks all over the world. Only 1.5 percent of MSEs receive loans from commercial banks in Kenya (International Centre for Economic Growth 1999). It is unclear, how the rest, who form the majority, meet their working and investment needs (Kimuyu and Omiti 2000). The existing literature has not captured the factors that make commercial banks to ration credit even to the creditworthy borrowers. This study intends to fill that gap. The objective of his study was to examine the factors influence credit rationing by commercial banks in Kenya. Descriptive research design was used in the study. The target population from which the sample was drawn is Commercial banks within Nairobi region. A representative sample was drawn using the Proportionate Stratified random sampling. Both primary and secondary data was used in the study. Secondary data was obtained from books and internet while the primary data was collected through the questionnaires which were administered to the credit analysts based at the head offices of the commercial banks sampled. Data collected was validated, edited and coded then analyzed using descriptive statistics with the aid of Statistical Package for Social Sciences (SPSS). Data presentation methods used were tables, charts and diagrams. The study established that the key factors that influenced credit rationing by commercial banks in Kenya are information asymmetry, level of debt in borrower's capital structure and the amount of collateral. Some of the recommendations that the study made were that it is beneficial for banks to ration credit but it should be done with professionalism and with no biasness, the factors that influence rationing of credit should be evaluated thoroughly by the person in charge and given priority before issuing credit. And the Banks should find out more about credit rationing and how it can contribute to their business growth.
TABLE OF CONTENTS

DECLARATION ......................................................................................................................... ii
DEDICATION ............................................................................................................................. iii
ACKNOWLEDGEMENT ............................................................................................................... iv
ABSTRACT ................................................................................................................................. v
TABLE OF CONTENTS ............................................................................................................... vi
LIST OF TABLES ....................................................................................................................... ix
LIST OF FIGURES ................................................................................................................... x
ABBREVIATIONS .................................................................................................................... xi
DEFINITION OF TERMS .......................................................................................................... xii
CHAPTER ONE ......................................................................................................................... 1
INTRODUCTION ....................................................................................................................... 1
  1.1 Background to the study ................................................................................................... 1
  1.2 Statement of the problem ............................................................................................... 2
  1.3 Objectives of the study ................................................................................................ 4
    1.3.1 General objective ..................................................................................................... 4
    1.3.2 Specific objectives .................................................................................................. 4
  1.4 Research Questions ....................................................................................................... 4
  1.5 Scope of the study ......................................................................................................... 4
  1.6 Significance of the study ............................................................................................. 5
  1.7 Limitations and assumptions of the study ................................................................ 5
    1.7.1 Limitations of the study ....................................................................................... 5
    1.7.2 Assumptions of the study ..................................................................................... 5

CHAPTER TWO ....................................................................................................................... 6
LITERATURE REVIEW ............................................................................................................. 6
  2.0 Introduction .................................................................................................................... 6
  2.1 The Credit Market ........................................................................................................ 7
    2.2.1 Demand for Credit ............................................................................................... 7
    2.2.2 Supply of credit ................................................................................................... 8
  2.3 Historical evidence of credit rationing ....................................................................... 8
    2.3.1 Poor Credit Rationing ......................................................................................... 9
2.4 Factors influencing credit rationing by Commercial banks ......................................................... 10
  2.4.1 Information Asymmetry ........................................................................................................ 11
  2.4.2 Cost of Borrowing ................................................................................................................ 12
    2.4.2.1 Interest rates ................................................................................................................. 12
    2.4.2.2 Amount of collateral provided by borrowers ................................................................ 14
  2.4.3 Legal constraints .................................................................................................................... 15
  2.4.4 Level of debt in a borrower’s capital structure ..................................................................... 16
  2.4.5 Herding behavior .................................................................................................................. 16
  2.5 Review of previous studies ....................................................................................................... 17
  2.6 Conceptual framework ............................................................................................................. 18

CHAPTER THREE ................................................................................................................................. 19
RESEARCH METHODOLOGY .............................................................................................................. 19
  3.0 Introduction .............................................................................................................................. 19
  3.1 Research Design ....................................................................................................................... 19
  3.2 Target Population ..................................................................................................................... 19
  3.3 Sampling Design and Sample Size .......................................................................................... 19
  3.4 Data Collection tools and instruments ..................................................................................... 20
  3.5 Data Analysis ........................................................................................................................... 20

CHAPTER FOUR ..................................................................................................................................... 21
DATA ANALYSIS AND FINDINGS ........................................................................................................... 21
  4.1 Introduction .............................................................................................................................. 21
  4.2 Background information .......................................................................................................... 21
    4.2.1 Response rate ..................................................................................................................... 21
    4.2.2 Work force in banks .......................................................................................................... 22
    4.2.3 Number of Employees in credit department ..................................................................... 23
    4.2.4 Professional qualifications of workforce in credit department ....................................... 24
    4.2.5 Key services offered by banks .......................................................................................... 25
    4.2.6 Category of clients provided with credit .......................................................................... 26
    4.2.7 Sectoral distribution of credit ........................................................................................... 27
    4.2.8 Types of credit in terms of repayment period .................................................................. 28
  4.3 Credit Rationing ........................................................................................................................ 29
    4.3.1 Extent of credit rationing by Kenyan banks ....................................................................... 29
LIST OF TABLES

Table 3.1: Sampling Strategy ................................................................. 20
Table 4.1: Response Rate ................................................................. 21
Table 4.2: Credit Provision by Sector ................................................. 27
Table 4.3: Information Asymmetry ..................................................... 32
Table 4.4: Cost of borrowing ............................................................... 33
Table 4.5: Legal constraints ................................................................. 34
Table 4.6: Level of debt in customer’s capital structure ......................... 34
Table 4.7: Amount of collateral ......................................................... 35
Table 4.8: Herding behavior ............................................................... 35
LIST OF FIGURES

Figure 2.1: Conceptual Framework ................................................................. 18
Figure 4.1: Size of Workforce in Bank ............................................................... 22
Figure 4.2: Size of Workforce in Credit Department ........................................ 23
Figure 4.3: Professional Qualifications ............................................................ 24
Figure 4.4: Services Offered by Banks ............................................................. 25
Figure 4.5: Categories of Bank Clients ............................................................ 26
Figure 4.6: Credit Services Offered by the Banks ........................................... 28
Figure 4.7: Extent of credit rationing ............................................................... 29
Figure 4.8: Utilization of forms of credit rationing ........................................... 30
Figure 4.9: Reasons for not rationing credit .................................................... 31
Figure 4.10: Extension of credit despite negative risk profile ........................... 37
ABBREVIATIONS

CBK-Central Bank of Kenya

GDP-Gross Domestic Product

MSE-Micro and Small Enterprises

BSD-Bank Supervision Report

DFI-Development Finance Institutions

ACIB-Associate of Chartered Institute of Bankers
DEFINITION OF TERMS

Information Asymmetry

Information asymmetry is when one party to an economic relationship or transaction has less information about it than the other parties. It is also a situation whereby bankers and borrowers have different information about the same projects.

Financial Institution

Financial institution refers to any institution, which carries on, or proposes to carry on financial business and includes any other company, which the minister may by notice in the gazette declare to be a financial institution for the purpose of banking act.

Credit rationing

Credit is contractual agreement in which a borrower receives something of value now and agrees to repay the lender at some later date.

Rationing is to control supply of something.

Credit rationing is restrictions on the quantity of loans made available to an individual borrower. It is a phenomenon in which among observationally identical borrowers some receive loans and others do not. Potential borrowers who are denied loans would not be able to borrow even if they indicated a willingness to pay more than the market interest rate or to put up more collateral than is demanded of recipients of loans.

Herd behaviour

Herding behaviour describes how individuals in a group can act together without planned direction. The term pertains to the behavior of animals in herds, flocks and schools, and to human conduct during activities such as stock market bubbles and crashes, street demonstrations, sporting events, religious gatherings, episodes of mob violence and everyday decision-making, judgment and opinion-forming.
Banking business

Banking business is defined as accepting deposits from savers and channeling those deposits into lending activities.

Banking sector

Banking sector generally refers to commercial banks, non-banks financial institutions, mortgage companies and building societies. For the purpose of the study this term shall refer to commercial banks operating banking business in Kenya under the banking act.
CHAPTER ONE
INTRODUCTION

1.1 Background to the study

Commercial banks are the most dominant of financial institutions and function as financial intermediaries to fulfill a number of important roles. One of the functions is the brokerage role whereby through this role they tend to reduce cost to all the parties involved. They also undertake funds transformation role by attracting funds from government, businesses and repackaging them as financial products such as loans to suit the needs of different borrowers. They also lend to large numbers of other intermediaries and clients, banks are thus made able to create sophisticated port of diversified, which reduce risks to the banks and their clients. Banks are principal means of making payments (Mcmenamin, 1999).

Gatonye (1995) identifies three broad roles of banking industry in Kenya’s economy as: financial intermediation between savers and borrowers that entails mobilization of resources from entities with surplus funds and channeling them to the deficit areas. Implementation of government policies by way of money supply management using instruments of monetary policies namely: cash ratio requirement, open market operation and Treasury bill action. They also play another role of facilitating the flow and interaction of various economic acts. In Kenya before the liberation of financial system in the early 1990’s the government played a significant role in bank’s allocation of credit among borrowers (Long et al, 1995). By early 1990 liberalization was taking place and extensive deregulation measures were implemented. Country eliminated credit and interest rate controls and softened restrictions on market entry and diversification. Removal of controls on credit allocation meant that commercial banks were free to lend largely in accordance with their own internal credit policies, which would govern the factors to be considered by banks when making credit-rationing decisions. Greuning and Bratanovic, (2006) assert that credit risk is the major single cause of bank failures and therefore it’s management is key to survival of vast majority of banks to minimize credit risk and earn high profits, banks must lend successful loans which should be paid back in full. Though there is uncertainty in assessing which borrowers will be able to repay the loans (Saunders, 2006: Agenor, 2000).
Like most developing countries Kenyan financial market is inefficient and characterized by information asymmetry such that reliable information on borrowers and their investment proposals may not be easily available (Agenor, 1994; Popiel, 2006). Banks may suffer by giving credit to borrowers more likely to produce undesirable outcomes since they seek credit more aggressively. To be profitable banks have to overcome the adverse selection of moral hazard problems that make loan defaults more likely. One way is through credit rationing whereby lenders refuse to make loan even though borrowers are willing to pay the stated interest rates or even more. They can also restrict the size of loans to less than the borrower would like (Mishkin, 1995). In the event that the bank has sufficient reliable information on a borrower who is then rated as credit worthy, will the bank issue the full amount of credit that has been applied for? It is likely there are other factors that banks consider which may lead them to ration credit. Dallami and Jigalge (1991) found that banks in their decisions to extend loans are concerned not only with the credit worthiness of individual borrowers, but also with other broader issues or factors, which they termed credit market variables.

The significance of these factors lay in their influence on banks degree of conservatism and credit rationing and the fact that they affect banks lending decisions independent of the credit worthiness of the individual borrowers. Thus credit extended to a particular borrower may change as a result of changes in these factors, even if the borrower’s credit worthiness had not changed. Motivated by this phenomenon this paper seeks to test the factors identified by Dallami and Jigalge, 1991 for this case of Kenyan commercial banks. Other factors identified from literature will also be tested and study may also expose new factors pertinent for the study population.

1.2 Statement of the problem

Firms require funds to meet financial needs at various stages of their development growth. Rationing of credit towards certain firms may therefore impact negatively on the firm’s access to credit, its financing and investment decision and on whether it will achieve the required growth rate to achieve its optimal operating size (Harris et al, 1996; Atieno, 1998). Statistics indicate that some sectors of the economy enjoy greater access to credit than others, for example the agricultural sector, which contributes 16.3% of the G.D.P, obtained only 9.6% of credit in 2004 and year 2005. The manufacturing sector, which contributes approximately 18.8% of G.D.P,
received 21.4% of credit and the trade sector contributing 12.5% of G.D.P received 18.9% of credit (central bank of Kenya bank supervision annual report 2008). Statistics for the 2009 indicate a similar pattern and the building and construction sector received 7.4% of credit compared to its contribution of 2.8% of G.D.P. Statistics suggest that banks issued more credit to some sectors at the expense of others which were credit rationed.

Bank credit is among the most useful sources of finance for business in Kenya (Government of Kenya 2005). Bank credit refers to loans and overdrafts extended to enterprises by formal banking institutions. Only 1.5 percent of MSEs receive loans from commercial banks in Kenya (International Centre for Economic Growth 1999). MSEs are generally undercapitalized, suggesting major operational difficulties in accessing credit and pursuing corporate goals. Kimuyu and Omiti (2000) observe that 18.4% of the MSEs in Kenya cite access to credit as their second most severe constraint after market access. Further the 1999 National Baseline survey (International Centre for Economic Growth et al. 1999) indicates that 70% of the MSEs in Kenya require loans that do not exceed Kshs. 20,000 while 96.3% do not require loans exceeding Kshs. 100,000. It is unclear, how the rest, who form the majority, meet their working and investment needs (Kimuyu and Omiti 2000). Perhaps this is not surprising in light of the magnitude of barriers that they face in accessing credit. Yet there is little information as to how the few MSEs that access formal credit manage to do so in light of this very difficult environment. There have been a number of attempts to explain the limited access to credit by MSEs in Kenya.

The first highlights the prevalence of factors external to MSEs including the limited capacity, outreach and linkages by financial intermediaries as the main constraints to MSEs access to credit (Atieno 2001). The second perspective also acknowledges the problem of macro level constraints, but emphasizes the greater explanatory powers of the relatively weak MSEs capacities including lack of tangible security and limited human capital (Kimuyu and Omiti 2000). Arguably, both perspectives have enhanced our understanding of the factors that affect the likelihood of MSEs to access bank credit. This suggests that MSE’s are an example of firms that experience severe rationing of credit by commercial banks. The existing literature has not addressed the factors that commercial banks consider when making decisions.
on credit rationing this is the gap that this study intends to fill. Therefore the purpose of the study will be to find out the factors influencing credit rationing by commercial banks in Kenya.

1.3 Objectives of the study

1.3.1 General objective
The general objective of this study is to determine the factors explaining credit rationing by commercial banks in Kenya.

1.3.2 Specific objectives
The specific objectives of the research are:

i. To determine how legal constraints influences credit rationing by commercial banks.

ii. To find out how information asymmetry influences credit rationing by commercial banks.

iii. To investigate how cost of borrowing influences credit rationing by commercial banks.

iv. To establish how level of debt in borrower’s capital structure influences credit rationing by commercial banks.

v. To investigate how herding behavior influences credit rationing by commercial banks.

1.4 Research Questions
The study was guided by the following questions:

i. How legal constraints do influences credit rationing by commercial banks?

ii. How does information asymmetry influences credit rationing by commercial banks?

iii. How does cost of borrowing influences credit rationing by commercial banks?

iv. How does level of debt in borrower’s capital structure influences credit rationing by commercial banks?

v. How herding behavior does influences credit rationing by commercial banks?

1.5 Scope of the study
The study was limited to the commercial banks in Kenya found within Nairobi because of the time constraint while conducting the research. The study will focus on the credit analysts of the banks at the head offices.
1.6 Significance of the study

The study is hoped to benefit the following parties:

Borrowers: The significance of this research is to explain access to commercial bank credit by borrowers. This will assist borrowers in assessing their prospects for bank credit and also reveal the aspects that borrowers should address in order to enhance their chances of obtaining bank credit.

Policy makers: This study also seeks to draw attention to the government and public policy makers, results of the study may provide information that could be useful when formulating policies aimed at improving credit availability to firms with characteristics that pre-disposes them to credit rationing by the banks and especially those that contribute significantly to country’s G.D.P.

Government: Findings from the study may provide a rationale for government intervention to improve access to high quality credit information in the financial sector. This may reduce the use of credit rationing to offset information asymmetry problems of perceived high credit risk, moral hazard and adverse selection.

General public: The study will contribute towards better understanding of commercial banking environment in the area of credit to the general public.

1.7 Limitations and assumptions of the study

1.7.1 Limitations of the study

Due to the financial resources available to the researcher, a sample was selected and not a census. The study selected a sample that was representative and hence the findings were generalized to represent the entire target population.

1.7.2 Assumptions of the study

The researcher assumed that all the respondents were honest. A cover letter from the university was attached to the questionnaires to assure the respondents confidentiality.
CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction
The importance of commercial banks can be assessed in a number of ways. They hold most of total assets of all financial institutions and they are the principal means of making payments through checking accounts from demand deposits and electronic funds transfer services. Commercial banks offer a wider array of financial services than any other financial institutions, meeting the credit, payment and savings needs of individuals, businesses and governments (Rose, 1997). Banks are today the principal channels for government monetary policy. The central bank of Kenya implements policies that indirectly affect interest rates and the supply of credit mainly through altering the levels and growth of reserves held by banks. Banks are also major buyers of debt securities issued by the central bank of Kenya (Popiel, 1994; Kinyua, 1997).

The principle business of commercial banks is to make loans to qualified borrowers. Loans are among the highest yielding assets a bank can have in its portfolio and they provide the largest portion of most banks operating revenue. Banks make loans of reserve to other banks through the overnight lending and to security dealers through repurchase agreements. In the Kenyan banking system sector however, direct loans to businesses and individual are far much important in terms of volume (Central bank of Kenya annual report, 2009). By banks making loans and investments whenever excess reserves appear, the banking system eventually creates total deposits and total credit several times larger than the original volume of new funds received. Thus commercial banks play a key role in growth of credit in the economy by the creation of money from public’s deposits (Mishkin, 1995). Historically commercial banks have preferred to make short-term loans to businesses as working capital finance, principally to support day-to-day operations and purchases of inventory. This practice can be traced to the era of financial repression, which restricted banks to short-term maturities (Popiel, 1994). This included the term loans whereby commercial banks also lend to real estate field and to the building and construction sector. The loans are made after negotiations between the bank and its customers following which a written agreement is prepared meeting the specific credit needs of the customer and requirements of the bank for adequate security and income (Wisdom, 1997).
2.1 The Credit Market

The credit market is characterized by an interaction of supply and demand for credit.

2.2.1 Demand for Credit

Markets for credit are not sharply separated by purpose or user, however, Dietrich, (1996) distinguishes between retail and wholesale demanders of credit. Wholesale customers are business firms or government investing in plant and equipment, large public works or stocks of inventories and often operate on an enormous scale. Retail market consists of individual and households acquiring comparatively in expensive assets like houses and cars but in large aggregate quantities. The author identifies three reasons for borrowing money:

Investment in real assets: Borrowing for real investments as in plants and equipments occurs when the investment earn more in value of goods and services produced than the cost of borrowing. At a lower cost of funds, more productive investments are attractive and more credit will be demanded. Borrowers’ evaluations of investment opportunities are an obvious determinant of demand for credit.

Liquidity to make required payments: Demand for liquidity may mean borrowing in order to pay bills while avoiding liquidation of assets held. The borrower’s value of holding those assets more than the option of selling the assets to pay bills, this type of credit is often called working capital assets like inventories.

For financial restructuring: Financial restructuring means buying assets and issuing new debt or selling assets and retiring outstanding debt. This also means differing valuations of assets or investments. The demand for credit for investment, liquidity and restructuring differs in the length of time the credit desired would be needed, whereby borrowing for real investment or restructuring is usually for the longer time period for the assets to realize their long-run value. Credit for liquidity purposes is short-term based. Dietrich, 1996 concludes that the demand for credit comes from evaluation of investment opportunities for both wholesale and retail credit market customers, against assets currently held. Popiel, 1994 assets that demand for credit is derived from opportunities to engage in productive investment.
2.2.2 Supply of credit

To carry out their extensive lending and investing operations commercial banks draw on a wide variety of deposits and non-deposits sources of funds, the bulk coming from deposits. There are three main types of deposits; demand, time and savings. Demand deposit more commonly known as current accounts, are the principal means of making payments because they are safer than cash and are widely accepted. Savings deposits generally are in small shilling amounts and bear relatively low interest rates but may be withdrawn by the depositor with no notice. Time deposits carry a fixed maturity and usually offer the highest rates a bank can pay (Rose, 1997).

Demand deposits form a wide the largest proportion for the Kenyan banking system at 35% of the total deposits, followed by time deposits at 33% and 24% for savings deposits (CBK-BSD annual report 2004). In Kenya banks are increasingly facing difficulties in attracting retail savings due to competition from informal institutions such as rotating savings and credit associations (Popiel, 1994). This may impact on the growth of loanable funds from the commercial

2.3 Historical evidence of credit rationing

At the time of independence in the 1960's commercial banks in Kenya were mainly foreign owned and had branches only in the capital and port cities. They confined their operations to providing short-term finance to trading companies, mines and plantations that were mainly foreign owned, as well as local businesses had difficulties obtaining bank credit and farmers had no access at all. The government decided that the banks were rationing credit to enterprises that would promote development and therefore started development finance institutions (DFI's) to provide long term finance to particular sectors on subsidized terms (Nyamai, 1989; long and vitas, 1999) under both circumstances local farmers and businesses in the non priority sectors experienced rationing of credit from financial system.

During the 1970's the government played a significant role in banks allocation of credit among borrowers. By the end of that decade the government directly or indirectly a majority interest in more than half of the banking institutions. In addition the lending rates were unrelated to the credit risk of underlying borrower with the base lending rates being fixed by the CBK as the primary monetary tool. Allocation of credit was biased towards government owned or controlled sectors, rather than the private sector. Small firms in particular were largely
borrowers resulting in poor loan portfolios for banks. This may lead to high risk of bank failure (Agenor, 2000).

Extensive inter-enterprise credit- government intervention in directing of credit leads to gross credit rationing of private sector against the public sector and favored borrowers. Acquiring subsidized credit however could sometimes add more to profits than production of intended goods thus those with access to subsidized credit at times lend to others without, resulting in an active curb market. Thus when the polish economy was centrally planned, Calvo and Corecelli, 1992 found that the volume of inter-firm credit in early 1990 was more than double the volume of bank credit for working capital.

Excess liquidity-the overall liquidity position does not only include cash and stock in trade but also credit potential from banks and other sources of money. Both banks and known banking institutions create financial claims and engage in multiple creation of credit and multiple increases in the respective demand liability. Credit creation can cause excess liquidity in the economy thus affecting both interest rates and the prices.

Inefficient use of funds- inefficient use of funds can result to poor credit rationing in that funds are rationed out to more important and profitable potential borrowers since they are unable to identify and distinguish between good and bad borrowers and so credit is rationed out to both parties. Inefficient use of funds because of prioritizing the less risky loans at the expense of high risk with more returns than the low risk will result to commercial banks not gaining as much profit, as they would have obtained by giving out to high risky borrowers.

Market failure- by limiting the availability or rationing of credit to non-priority sectors, directed credit allocation creates a form of market failure with a segmented financial market in which some obtain credit at very negative real interest rates, while non favored borrowers are left to obtain credit from retained earnings or more expensive and unstable informal sources

### 2.4 Factors influencing credit rationing by Commercial banks

There are various factors that have been identified that explain why banks ration credit. Several individuals have raised these factors up; they are stated and explained below
2.4.1 Information Asymmetry

In the world with perfect and costless information, banks would specify all action that might be undertaken by borrowers Stiglitz and Weiss (1981). However in reality banks are not able to control the actions of their borrowers. Vishwanath and Kaufman, (1989) assert that better information to lenders improves resource allocation and efficiency in an economy, directing credit to its most productive uses and bringing about economic prosperity. In Kenya however, Atieno, (2001) observes that the financial market are characterized by imperfect information where lenders often do not know the riskness of the borrowers applying for the loan and are imperfectly informed about the quality of the investment project. Thus they are unable to differentiate between good and bad borrowers, and may therefore resort to constricting supply to all firms.

Diaz Alejandro and Carlos, (1984) observes that a banker will surely not lend all a customers wants to borrow at the going interest rate, for the reason that though the borrower promises to repay in the future he may or may not be sincere or wholly credible. They assert that there is no humanly possible way of devising a fail-proof system of finding out the true intentions of borrowers, so lenders are likely to end up rationing credit, that is putting a ceiling on what arms length customers can borrow, regardless of there willingness to pay higher interest rates.

Information asymmetry can lead to credit rationing due to the following reasons:

- **Adverse selection**- it ensures that a disproportionate number of bad projects are presented for financing. Borrowers are induced to choose projects for which the probability of default is higher, because riskier projects are associated with higher expected returns. A bank would like to be able to identify borrowers who are more likely to repay, but establishing the probabilities is difficult because it means ability to choose between good and bad borrowers of which is not an easy task. In such circumstances a bank may opt to ration credit supply to both categories of borrowers.

- **Moral hazard**- after a contract comes into effect; borrowers may have an incentive to change their behavior in ways that adversely affect the interest of the lender. Smith and Warner (Dietrich, 1996) classify the types of actions borrower firms may take that are in conflict with lenders interests into four major categories namely: dividends payments, claim dilution, asset substitution and under investments.
Dividends reduce future investments thus reducing the value of earning assets. Claim dilution occurs by obtaining additional credit, which may have higher claim on firm’s assets. The banks are concerned that the value and safety of their credit will be diluted. Asset substitution is also undesirable and under investment may result from reluctance by the shareholders to undertake projects that have positive net present value at the required return on debt, but do not have positive value at risk adjusted discount rates relevant for shareholders. In order to reduce the problems caused by the conflicts above, the lender banks may insist on terms that include restrictions to borrowers as loan contracts. Enforcing a loan contract or liquidating collateral property involves costs and even with speedy enforcement a bank may not be able to get all its money back. Such considerations may influence the banks to ration credit instead.

Moral hazard can also take place before entering a loan contract. Wisdom, 1996 observes a tendency for some borrowers when preparing loan proposals, to expect the banks to turn down their requests or grant lower than expected. Such borrowers may inflate their loan requirements.

- Cost of obtaining information and monitoring borrowers- information asymmetry means that a bank has to incur costs to explore the credit worthiness of borrowers before extending credit and afterwards in monitoring the borrower. Dietrich, (1996) argues that obtaining information on the actual performance of the investment of loan covenants is costly to gather and cannot be fully observed by banks.

- Behavior of foreign banks—when officers of a bank are familiar with the local economy, understand the language, know the business environment and are the major players in the various industries, the banks are better able to understand the impact of national and regional trends and competitive developments on credit demand and risks in their regions. They also require the expertise and ability to closely observe the borrowers. Lacking this, foreign banks may be more likely to ration credit to small firms to larger extend than domestic banks and concentrate instead on larger ones (Agenor, 2000).

2.4.2 Cost of Borrowing

2.4.2.1 Interest rates
From the basis of economics market equilibrium is attained when supply equals demand: if demand should exceed supply, the price will rise, decreasing demand and or increasing supply
until a new equilibrium is achieved at a higher price. This would apply in the credit market and no rationing would occur at equilibrium because interest rates movements would ensure that supply equaled demand. Stiglitz and Weiss, (1981) however found that there was a contractual interest rate such that lenders would not lend at above that rate, thus in credit market equilibrium can be attained with an excess demand for credit due to credit rationing. They attribute this phenomenon to the unique nature of the banking industry. Banks making loans are concerned both about the interest rate they receive on the loan and the riskiness of the loan. However, the interest rate a bank charge may itself affect the riskiness of the pool of loans by either:

- Sorting potential borrowers (the adverse selection effect)
- Affecting the actions of borrowers (the incentive, moral hazard effect). Both effects derive directly from the residual imperfect information, which is present in credit market after the banks have evaluated loan applications.

Adverse selection-The adverse selection aspect of interest rate is a consequence of different borrowers having different probabilities of repaying their loan. The expected return to a bank is a function of both interest rate and probability of repayment, however establishing the probabilities is difficult because banks cannot distinguish between “good borrowers” and “bad borrowers” in a world with information asymmetries.

At high interest rates the risk of adverse selection rises because borrowers with high repayment probabilities drop out and are replaced by those with high default risk (Saunders, 1996; Stiglitz and Weiss, 1981). The average riskiness of those who borrow increases, lowering the banks profit, thus there is a contractual interest rate such that lenders would not lend at above that rate. This is the interest rate at which the expected return to the bank is maximized and is the bank optimal rate. At this rate the demand for funds could exceed the supply but the banks would not lend to an individual who offer to pay more than this rate, because to the bank’s judgment such a borrower was likely to be a worse risk than the average loan at an interest rate which is optimal, thus credit rationing occurs.

Interest as an incentive mechanism (the moral hazard problem)- the second way in which the interest rates affect banks expected return from a loan is by changing the behavior or the borrower. Because the behavior of a borrower cannot be perfectly and causelessly be monitored by the lender, the banks will take into account the effect of the interest rates increases the relative
attractiveness of riskier projects, thus borrower become more inclined to talking actions that are contrary to the interest of the lender. This provides another incentive for banks to ration credit rather than raise the interest when there is an excess demand for credit.

Therefore under imperfect information, increasing rates increases the riskiness of the banks loans portfolio by increasing the probability of adverse selection and moral hazard and decreasing the banks profits. When the market interest rates are higher than the bank optimal rate banks have less incentive to lend and may even stop lending. Credit restrictions can take the form of limiting the number of loans the banks will make, rather than limiting the size of each loan. The Stiglitz and Weiss, (1981) model explains why bank credit is severely rationed in some developing countries with bank lending rates being unresponsive to excess demand for credit. They also demonstrated other ways of screening borrowers and rationing credit using the criteria of the amount of the loan and the amount of collateral.

2.4.2.2 Amount of collateral provided by borrowers

Wisdom, (1997) observes that solid collateral endorsers may allow the bank to release more credit to a borrower at favorable interest rates or terms. It would appear rational that when there is an excess demand for credit, banks would increase its collateral requirements, increasing the liability of the borrower in the event that the project fails, reducing the demand for funds and reducing the riskiness of losses or default to the bank in the event of default and increasing returns to the banks.

Stiglitz and Weiss, (1981) prove that this is infact not so. They demonstrate why banks should not increase collateral requirements as a means allocating credit because increasing collateral requirements have adverse selection effects. Under imperfect conditions a bank cannot observe either the borrowers wealth or is source. Wealthier individual may be those who in the past, succeeded in risky endeavors and are therefore more likely to be risk averse than the more conservative individuals who have in the past invested in relatively safe securities and are consequently less able to furnish large amounts of collateral. Thus those who put up the most collateral would also be willing to take greatest risk, lowering the banks return.

Thus collateral requirements may have beneficial incentive effects up to an interior bank-optimal interest rate beyond which increased collateral may have counteracting adverse selection effects. The bank demands.
2.4.3 Legal constraints

Under the CBK act, there are legal requirements, which may affect supply of loanable funds from a particular bank and hence extent of credit rationing they include:

- **Reserve requirements**

The CBK requires institutions to maintain minimum cash balances with it as reserve against their depositors and other liabilities. Currently the ratio is 10%. These requirements are legally binding and the central bank may impose a penalty interest charge on any institutions, which fail to maintain the minimum cash balances. Agenor, 2000; Alzenham and Hosmaister, 2002 hold the view that increases in excess reserves above the minimum requirements by banks are a sign of increased credit rationing.

Open market operations- for the purposes of regulating the money supply the bank may purchase hold or sell negotiable securities of any maturity issued by the government or any other negotiable securities specified by banks.

- **The banking act restrictions**

For a particular bank, there are regulations governing limits and restrictions on class of borrowers, which may affect availability of credit or restrict the amount of credit to particular borrowers as followers.

- **Limits on advances, credits and guarantees**

Commercial banks, like other financial institutions, are not permitted to grant an advance, credit facility or give any financial guarantee or incur any other liability exceeding 25% of its core capital to one borrower. The core capital shall not be less than 8% of the total deposit liabilities to the bank. The banks are not permitted to grant any credit exceeding 25% of the share capital to a company in which that bank has a beneficial interest in order not to grant any unsecured loan to any of its employees or person of whom their officer has an interest in. the closeness in association between banks and non financial firms can indeed lead to distortions in the allocation of credit. Diaz Alejandro and Carlos (1984) found that such linkages, which are not arms length and are rarely, based on profitability/risk return considerations, were responsible for the high use of debt by some private firms in Argentina and Chile.
• Regulation on liquidity management (minimum liquid assets)

The objective of liquidity management is to ensure that an institution will be able to meet in full, all its obligations and commitments as they fall due, thus a bank is required to hold liquid assets as a tool for prudential business management. The central bank requires a bank to maintain a statutory minimum of 20% of its deposit liabilities and liquid assets. Prudential regulation for banking institutions refers to restrictions on large exposures. All credit facilities above 10% of an institution and core capital are considered as large exposures. The aggregate facilities to all large exposures at any one time shall not exceed five times of the institution’s core capital.

• Weak regulatory and legal framework

Smith and Warner (Dietrich, 1996) classify the types of borrowers may take against lenders interests. In order to reduce the problems caused by the conflicts between the banks and the borrower, banks may insist on terms that include restrictions to borrowers such as loan contracts or covenants. However a firm may have incentive to go against the restrictions if the legal system is known to be ineffective or inefficient. The absence of an effective legal system can induce banks to forego the risk of lending against loan covenants and ration credit instead.

2.4.4 Level of debt in a borrower’s capital structure

Lenders are concerned that a high level of debt by firms will dilute the value and safety of their credit, thus the proportion of debt in the capital structure of a firm or sector may induce credit rationing. Glen (1994) notes that creditors recognize the risk that debt imposes on a firm, and they can respond by adjusting interest rates as leverage increases, or refuse to lend to firms that are too highly leveraged, or impose restrictions to prevent further issue of debt beyond point.

2.4.5 Herding behavior

A theoretical argument proposes that banks may ration credit based on herd behavior. This is the pattern of bank lending where a bank participates in or withdraws from certain loan markets because other banks are doing so (Cottrell, 1995). Such a model could provide an explanation for contractions characterized by credit rationing, or expansions of particular types of lending. Herding behavior can be rationed in imperfect markets where there is limited information for the players. In Kenya this tendency could be applicable due to the strong market share for the big banks. Herding behavior can also be explained by the free rider problem where a bank, which
collects information about a particular risk, is unable to prevent others from using that information.

2.5 Review of previous studies

According to a study done by Atieno (2001), Commercial banks and other formal institutions fail to cater for the credit needs of smallholders, however, mainly due to their lending terms and conditions. It is generally the rules and regulations of the formal financial institutions that have created the myth that the poor are not bankable, and since they can’t afford the required collateral, they are considered uncreditworthy. The results showed that the limited use of credit reflects lack of supply, from the rationing behavior of both formal and informal lending institutions. The study concluded that given the established network of formal credit institutions, improving lending terms and conditions in favour of small-scale enterprises would provide an important avenue for facilitating their access to credit.

According to a study done by Kimuyu P.et al. (2002), took up the question of how finance is related to other aspects of small business. Specifically, they studied the determinants of probably the most important financial decision of MSEs, that of how to raise capital for the business, distinguishing between the initial capital and any follow-up capital acquired for expansion or restructuring. They examined this decision in the context of a large sample of MSEs in Kenya. Kenya’s small enterprise sector forms an important part of the economy and available data suggests that, in the recent past, it has grown faster than the larger organized sector. Moreover, small enterprises tend to be more labour-intensive than large enterprises (Snodgrass and Biggs, 1995). Thus, a lot is expected of Kenya’s MSEs in the fight against poverty and there is considerable interest in research that can enlarge the pool of information to help inform policy towards MSEs. More precisely, in their research, they identified first, the factors which lead Kenyan MSEs to borrow, whether from formal or informal sources, as against using equity; second, the determinants of the gearing rate which they actually employ.

According to a study done by Wagema (2006), which sought to identify critical factors that influence access to bank credit by MSEs is indicated that entrepreneurial orientation is a direct determinant of access to credit by MSEs. Further, knowledge-based resources gained from maturation (age), training, previous start-up experience and vicariously through
entrepreneurial parents were found to be associated with greater levels of entrepreneurial orientation. Overall, these findings support the literature that underscores the primacy of entrepreneurial factors, over operating environment in facilitating small enterprises’ access to bank credit.

2.6 Conceptual framework

This section discusses the conceptual framework for analyzing the factors influencing credit rationing by commercial banks in Kenya.

**Independent Variable**

- Information asymmetry
  - Adverse Selection
  - Moral hazard

- Cost of borrowing
  - Interest Rate
  - Collateral Provided

- Legal constraints
  - Reserve Requirements
  - Liquidity management

- Level of debt in borrower’s capital structure
  - Indebtedness

- Herding behaviour

**Dependent Variable**

- Credit rationing
  - Amount of loan applied.
  - Amount of loan granted.

Figure 2.1: Conceptual Framework
CHAPTER THREE
RESEARCH METHODOLOGY

3.0 Introduction
This chapter will describe in detail the procedure that was adopted in this study with respect to the factors that influence commercial banks in Kenya. Specifically the focus was on the research design, the target population, sampling design and sample size, data collection tools and instruments and data analysis techniques.

3.1 Research Design
The research design which was used is descriptive research design. Descriptive research determines and reports the way things are and also helps a researcher to describe a phenomenon in terms of attitude, values and characteristics (Mugenda and Mugenda, 2003). According to Orodho (2003), descriptive design allows researchers to gather, present and interpret information for purposes of clarification. This design was chosen because the researcher seeks to find out the current state as far as credit rationing by commercial banks is concerned.

3.2 Target Population
The population of interest for this study comprised of the 44 commercial banks licensed to carry out banking business in Kenya under the banking act (cap 488) section (4) and (5) that are in operation as at 2009 according to Central Bank of Kenya (2009): Annual Bank Supervision Report.

3.3 Sampling Design and Sample Size
The sampling design which was used is the proportionate stratified random sampling which according to Kombo, and Tromp, (2006) stratified random sampling involves dividing the population into homogenous subgroups and then taking a simple random sample in each subgroup. The banks will be stratified according to the asset base that is Large (assets above ksh 15 billion), medium (assets above ksh 5 billion but below 15 billion) and small (assets below 5 billion). The researcher will take 70% of the total banks in each stratum. The study focused on the credit analysts at the credit department based at the head office of the selected banks this is because the final decision of loan approval is made at the head office.
Table 3.1: Sampling Strategy

<table>
<thead>
<tr>
<th>Stratum</th>
<th>N</th>
<th>Pi</th>
<th>S_i</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>18</td>
<td>13</td>
<td>13*3 =39</td>
</tr>
<tr>
<td>Medium</td>
<td>14</td>
<td>10</td>
<td>10*3 =30</td>
</tr>
<tr>
<td>Small</td>
<td>12</td>
<td>8</td>
<td>8*3=24</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>31</td>
<td>93</td>
</tr>
</tbody>
</table>

Where \( N = \) Total population  
\( Pi = \) Population in each stratum.  
\( S_i = \) Sample size.

3.4 Data Collection tools and instruments

This study made use of both the primary data and secondary data. Primary data was collected using semi-structured questionnaires that were administered personally by the researcher. The questionnaires were administered to credit analysts of the banks under study. Three questionnaires will be issued to each sample this is because in each commercial bank there are many credit analysts who approves the credit sought by borrowers. This made the sample size to be 93. The questionnaire was divided into two parts: in part one seek to obtain will background information on the banks and related credit environment, while part two will addresses credit rationing issues. Secondary data will be collected from the statistics available at the Central bank of Kenya.

3.5 Data Analysis

Data collected was validated, edited and coded and then analyzed using descriptive statistics such as percentage and means. Data presentation methods used were tables, charts and diagrams. Factor analysis will be used to rank the factors in order of importance. The statistical package for social sciences (SPSS) will be used to generate the descriptive statistics.
CHAPTER FOUR
DATA ANALYSIS AND FINDINGS

4.1 Introduction
This chapter deals with data analysis, findings and discussions on research findings. The purpose of this study was to establish the factors influencing credit rationing by commercial banks in Kenya. Among the factors investigated involved information asymmetry, legal constraints, amount of collateral provided by the borrower, cost of borrowing, level of debt in a borrower's capital structure and herding behavior. The study targeted the credit analysts based at the head offices of the commercial banks in Kenya whereby a sample of 31 commercial banks were selected based on the sampling strategy in the previous chapter. The data was presented in form of tables, charts and graphs.

4.2 Background information

4.2.1 Response rate
This study had targeted a total of 93 respondents which was computed as shown in the sampling strategy in table 3.1. However due to the study limitations, only 75 responses were achieved which represents 81% response rate. This formed the basis for the analysis presented in this chapter. This is shown in table 4.1 below:

<table>
<thead>
<tr>
<th>Table 4.1: Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target Samples</strong></td>
</tr>
<tr>
<td><strong>Successful responses</strong></td>
</tr>
<tr>
<td><strong>Response rate</strong></td>
</tr>
</tbody>
</table>

Source: Research Data, (2011)
4.2.2 Work force in banks

Findings indicate that most banks have a workforce ranging from 200 and above fulltime employees. This category constituted 40% of all banks. At least 24% of the banks have a workforce of 151-200 employees while 12% of the banks have 101-150 employees and 16% of the banks have 101-150 employees. The remaining 8% of the banks have between 1-50 employees. This suggest that bank industry is dominated by large sized banks in terms of workforce, with 80% of the banks having over 100 employees compared with 20% having below 100 employees.

![Figure 4.1: Size of Workforce in Bank](source: Research data, (2011))
4.2.3 Number of Employees in credit department

Findings indicated that most banks have a workforce ranging from 1-50 of the number of employees in the credit department. This category constituted 60% of all banks. At least 16% have number of employees in credit department ranging from 51-100 12 % represented 101-150. Another number of employees in credit department in banks constituted of persons 151-200 had 8% and the remaining 4% of the employees in credit department had over 200 persons. This suggests that the majority of the number of employees in credit department range between1-50 employees in most banks.

Figure 4.2: Size of Workforce in Credit Department. Source: Research data, (2011)
4.2.4 Professional qualifications of workforce in credit department

The study revealed that 40% of employees who work in a bank credit department had a basic university degree in commerce, economics or other business related subject. 52% have had training in professional areas that deal with credit management, out of these 28% are certified public accountants while those with banking qualifications such as ACIB constitute 12% of the workforce of credit department, the rest 12% out of the 52% had attained more highly rated qualifications such as certified financial analyst, masters in business administration staff in credit department.

![Professional Qualifications](image)

Figure 4.3: Professional Qualifications

Source: Research data, (2011)

The findings that about 52% of employees in credit department have professional qualifications indicates that most banks recognize the need to employ well skilled staff in the area of credit therefore the handling of credit issues is given great importance and is carried out with professionalism. Credit rationing will be able to be carried out with professionalism and with reduced biasness because of having professional staff in credit department.
4.2.5 Key services offered by banks

The study investigated the type of services offered by commercial banks in a bid to illustrate the range of services and possibly detect any development in this area given the competitive banking industry in Kenya.

![Services offered by banks](image)

**Figure 4.4: Services Offered by Banks**

Source: Research data, (2011)

The study found that 100% of the banks offered credit provision services, 80% provided deposit and credit taking, consultancy and advisory services offered by Kenyan banks comprised of 75.2% with trade and finance service having 60%. 15% of the banks provided foreign exchange while 10% provided safe deposit lockers retail banking comprised of 45% and funds transfers 40%. Other services offered by a small percentage of banks include agent banking, treasury...
services, and asset finance with each having 5%, 10% and 20% respectively. Clearly then it can be seen that most banks offer a combination of services to satisfy customers due to the competitive nature of the banking industry.

4.2.6 Category of clients provided with credit

The banks were found to offer their credit facilities to a variety of borrowers indicating the diversity of clients that provide with credit facilities.

![Figure 4.5: Categories of Bank Clients](source: Research data, (2011))

Findings indicated that banks issuing of credit to individual borrowers comprised of 91%, to groups of people had 38.5%, government is 8% and business firm or organizations had the largest portion of 98.23%. From the responses provided it’s clear that most banks give credit to more than one category of clients; however the data showed that majority of the banks have specialized on one category of borrowers that is the business firms and organizations.
4.2.7 Sectoral distribution of credit

The major sectors of the economy in Kenya include the agricultural, manufacturing, trade, building and construction and tourism. The major payers in this sector require loans to finance working capital requirements and bank credit is one crucial source of funds. This study sought to find out the extent to which the banks provide credit to different sectors of country's economy.

<table>
<thead>
<tr>
<th>SECTORS</th>
<th>FREQUENCY</th>
<th>PERCENTAGE OF BANKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural sector</td>
<td>27</td>
<td>68.7</td>
</tr>
<tr>
<td>Manufacturing borrowers</td>
<td>39</td>
<td>72.3</td>
</tr>
<tr>
<td>Trade and industry</td>
<td>51</td>
<td>86.3</td>
</tr>
<tr>
<td>Building and construction</td>
<td>42</td>
<td>73.8</td>
</tr>
<tr>
<td>Tourism</td>
<td>21</td>
<td>38</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>19.4</td>
</tr>
</tbody>
</table>

Source: Research data, (2011)

The study found that banks offered credit to a combination of sectors, the agricultural sector had 68.7% of credit provided, manufacturing borrowers received 72.3%, trade and industry had 83.1% with building and construction getting 73.8% and tourism 38%. Other small sectors received 19.4% of credit. Trade and industry had the largest proportion of credit with 86.3%. This clearly indicates that banks offer credit to combination of sectors with others having an advantage of more credit than others.
4.2.8 Types of credit in terms of repayment period

The study sought to establish the types of credit facilities offered to potential borrowers categorized as short-term credit, medium term credit and long-term credit.

![Types of credit services offered by banks](image)

Figure 4.6: Credit Services Offered by the Banks  
Source: Research data, (2011)

The results of the finding in terms of types of credit services showed that short term credit comprised 94% and medium term credit offered comprised of 92% while long term loans had 75%. The study found that for most banks short-term loans had a repayment period of up to 12 months, this comprised of 94%, while medium term loans referred to those to be repaid within 24 months for majority of banks and 36 months for other banks and this comprised of 92% of response group that agreed to the period. For the majority of the banks long-term loans had a repayment period of 60 months this comprised of 75 of response group. This clearly indicates that most banks give short term credit to the borrowers.
4.3 Credit Rationing

4.3.1 Extent of credit rationing by Kenyan banks

The study sought to investigate the proportion between the banks that rationed credit and the banks that did not ration credit. The findings showed the following results:

![Extent of credit rationing by banks]

Figure 4.7: Extent of credit rationing  
Source: Research data, (2011)

The study found that 12% did not ration credit as long as the borrowers met the minimum credit score while 88% of banks rationed credit even among borrowers who had met the basic credit scores. This suggests that most banks rationed credit even to credit worthy borrowers.

4.3.2 Forms of credit rationing utilized

Since most banks indicated that they rationed credit, the study went on to investigate the main forms of credit rationing practiced by the banks going by the definition of credit rationing.
The data for utilization of forms of credit rationing showed that 85.25% of the banks clients got full credit but others did not get credit at all, 58.30% indicated that they extended credit but less than the borrower would like while 8.23% indicated borrowers paying high interest rates were likely to get credit. It’s clear that the largest proportion of forms of credit rationing utilized was some get full credit but others do not get credit at all.

4.3.3 Reasons for not rationing credit

The study found out that most banks which represented 80% gave full loan amount without rationing because credit was dependent only on the credit worthiness of a particular borrower.
4.4 Ranking of factors influencing credit rationing by banks in Kenya

This section sought to investigate the factors explaining why some Kenyan banks rationed credit and to rank the relative importance of each factor to the banks. The respondents were therefore asked to indicate the relative importance of each factor listed on a point likert scale. The results are based on mean ranks provided by the respondents. The likert scale had the following form.

4) Very important
3) Important
2) Somewhat important
1) Not important at all

The results of mean ranks for these factors are shown below:
4.4.1 Information Asymmetry

The findings presented in table 4.3 showed that 52% of the respondents reported that high cost of obtaining information on borrowers and investments and reduction of cost of obtaining information are not important factors at all to be considered when giving credit to borrowers. 24% of the respondents indicated that it is a very important factor to ration credit because of lack of reliable information on credit worthiness of the borrower. Lack of reliable information on credit worthiness of the borrowers and unfamiliarity with the local economy and business environment are important factors which influences commercial banks to ration credit. The two factors identified had an average mean of 2.6 and 2.12 respectively. High cost of obtaining information on borrowers and investments and reduction of cost in obtaining information were ranked with a mean of 1.72 each which implies that they are somewhat important factors influencing credit rationing by commercial banks.

<table>
<thead>
<tr>
<th>Statement</th>
<th>4 very important</th>
<th>3 important</th>
<th>2 somewhat important</th>
<th>1 Not important at all</th>
<th>TOTAL</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of reliable information on credit worthiness of the borrowers</td>
<td>18</td>
<td>15</td>
<td>36</td>
<td>6</td>
<td>75</td>
<td>2.6</td>
</tr>
<tr>
<td>High cost of obtaining information on borrowers and investments</td>
<td>3</td>
<td>12</td>
<td>21</td>
<td>39</td>
<td>75</td>
<td>1.72</td>
</tr>
<tr>
<td>Unfamiliarity with the local economy and business environment</td>
<td>9</td>
<td>15</td>
<td>27</td>
<td>24</td>
<td>75</td>
<td>2.12</td>
</tr>
<tr>
<td>To reduce costs of obtaining information</td>
<td>3</td>
<td>12</td>
<td>21</td>
<td>39</td>
<td>75</td>
<td>1.72</td>
</tr>
</tbody>
</table>

Source: Research data, (2011)

4.4.2 Cost of borrowing

The findings in table 4.4 below indicated that 60% of the respondents reported that it is a very important factor to ration credit in order to reduce the credit risk. While 24% of the respondents indicated that it was important for them to ration credit in order to avoid risk of adverse selection and the moral hazard. Therefore it is a very important factor to ration credit in order to reduce risks as it is depicted by an average mean of 3.32. The researcher also found out that it was
Table 4.5: Legal constraints

<table>
<thead>
<tr>
<th>Statement</th>
<th>4 very important</th>
<th>3 Important</th>
<th>2 somewhat important</th>
<th>1 Not important at all</th>
<th>TOTAL</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>High cost of preparing and enforcing loan contracts</td>
<td>12</td>
<td>21</td>
<td>24</td>
<td>18</td>
<td>75</td>
<td>2.36</td>
</tr>
<tr>
<td>Lack of legislation to promote information disclosure</td>
<td>6</td>
<td>15</td>
<td>36</td>
<td>18</td>
<td>75</td>
<td>2.12</td>
</tr>
<tr>
<td>Comply to government directive on priority</td>
<td>3</td>
<td>12</td>
<td>9</td>
<td>51</td>
<td>75</td>
<td>1.56</td>
</tr>
</tbody>
</table>

Source: Research data, (2011)

4.4.4 Level of debt in customer’s capital structure

The study sought to find out whether the amount of debt in the borrowers capital structure is a factor that influences credit rationing by commercial banks. The findings presented in table 4.6 shows that most banks found out that the level of debt in customer’s capital structure is a very important factor which influences credit rationing and it has an average mean of 3.08. A higher percentage that is 68% of respondents mentioned that it was a very important factor to be put into consideration before giving credit.

Table 4.6: Level of debt in customer’s capital structure

<table>
<thead>
<tr>
<th>Statement</th>
<th>4 very important</th>
<th>3 Important</th>
<th>2 somewhat important</th>
<th>1 Not important at all</th>
<th>TOTAL</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of debt in borrower capital structure</td>
<td>15</td>
<td>51</td>
<td>6</td>
<td>3</td>
<td>75</td>
<td>3.08</td>
</tr>
</tbody>
</table>

Source: Research data, (2011)

4.4.5 Amount of collateral

The study sought to establish whether amount of collateral affects the decision whether to give credit to borrowers or not. The findings as shown in table 4.7 indicated that it is a very important factor. Majority of the respondents which accounted for 72% agreed with the fact that the amount of collateral is a very important factor which influences credit rationing by commercial
banks. While 4% of the respondents reported that amount of collateral was not an important factor at all which influences credit rationing. From the findings it shows an average mean of 3.56 which implies that it is a very important factor. The amount of collateral determines the amount of credit granted this is because in case of default the collateral given is used by the bank to recover their money.

<table>
<thead>
<tr>
<th>Statement</th>
<th>4 very important</th>
<th>3 Important</th>
<th>2 somewhat important</th>
<th>1 Not important at all</th>
<th>TOTAL</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of collateral</td>
<td>54</td>
<td>72%</td>
<td>12</td>
<td>16%</td>
<td>6</td>
<td>8%</td>
</tr>
</tbody>
</table>

Source: Research data, (2011)

4.4.6 Herding behavior

The study sought to find out whether banks rations credit because other banks are rationing. From the findings in table 4.8 it shows that majority of the respondents concluded that the credit rationing is not influenced by lending practices observed by other banks. 76% of the respondents reported that it was not important at all to ration credit because other banks are doing so while 4% of the respondents reported that it was very important. From the findings it showed an average mean of 1.4 which implies that it is a somewhat important factor hence many banks do not ration credit because other banks are not giving credit.

<table>
<thead>
<tr>
<th>Statement</th>
<th>4 very important</th>
<th>3 Important</th>
<th>2 somewhat important</th>
<th>1 Not important at all</th>
<th>TOTAL</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenced by lending practices observed by other banks</td>
<td>3</td>
<td>4%</td>
<td>6</td>
<td>8%</td>
<td>9</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source: Research data, (2011)
4.4.7 Other factors

The study revealed other factors that had not been identified for testing but were found to influence credit-rationing behavior of some banks they include:

- **Past performance**

Some banks stated that they ration credit to borrowers because of the unsatisfactory performance of the previous loan advanced to the client.

- **Geographic location of borrower relative to the bank**

A few banks rationed credit to the borrowers because the borrower is situated in unfavorable geographic location. This was considered because before the bank advances a loan to firms and businesses a visit has to be done to access the business. Due to the unfavorable geographic location of the borrower the bank will ration credit because of the inaccessibility of the business premises.

- **Reputation**

A few banks stated that they rationed credit to firms that had questionable reputation as regards their responsibility to environmental issues. This was because the banks wanted to retain a good public image.

- **Political figures**

Some banks rationed credit to firms associated with local politicians even when they appeared to be credit worthy borrowers, citing that they are volatile and therefore the risk nature of politician’s ventures.

- **Bank size**

Some banks rationed credit because of their size mostly the banks that have less deposits rationed credit more than the banks with large deposits.
• Policy uncertainty

Some banks stated that they rationed credit to the borrowers due to the policy uncertainty which is always dynamic.

4.5 Extension of credit despite returning a negative risk / return profile

The study investigated the extent to which the banks extended credit to its clients despite them returning a negative risk / return profile; the results are shown in chart below:

![Chart showing extension of credit despite negative risk profile](image)

**Figure 4.10: Extension of credit despite negative risk profile** Source: Research data, (2011)

The study found that 80% of the banks did ration credit to borrowers due to them returning a negative risk / return profile while only 20% extended credit despite returning a negative risk / return profile, the reasons they stated for extension of credit despite returning a negative risk / return profile included:

• Clients Loyalty

The borrowers had an advantage of getting loans despite having a negative risk / return profile because they were loyal customers to the banks who carried out all their transactions with the banks.
• **Collateral**

Some banks stated that they extended credit to borrowers despite having a negative risk/return profile so long as the collateral that they provided was able to act as a good security in case of default. The results then showed that not all banks rationed credit to clients providing a negative risk/return profile though the percentage was not a large proportion with only 20%.

5.2 Statutory and Internal Factors

The study established that the factors influencing credit rationing by commercial banks were the number of employees in the credit department. The study also showed that the number of employees in the credit department was a common feature of banks that extended credit. The study established that fewer employees had a lower credit department and vice versa. The findings also indicated that banks with a credit department that employed over 200 employees had a number of reasons for taking credit from the economic area like CPA, ACID, and professional qualifications. The study found a strong correlation that more banks showed a lower percentage of credit rationing in the credit department.

The study established that the number of employees in the credit department was a common feature of banks that extended credit. The study also showed that the number of employees in the credit department was a common feature of banks that extended credit. The findings also indicated that banks with a credit department that employed over 200 employees had a number of reasons for taking credit from the economic area like CPA, ACID, and professional qualifications. The study found a strong correlation that more banks showed a lower percentage of credit rationing in the credit department.
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This chapter consists of a summary of the findings of the research, conclusions relating to the research objectives, suggestions or recommendations on the factors influencing credit rationing by commercial banks in Kenya and finally areas that needs further research.

5.2 Summary of the findings
The study aimed at establishing the factors influencing credit rationing by commercial banks in Kenya. The study targeted a total of 93 respondents and there was a response rate of 81% this was due to the study limitations. The study established that most banks had over 200 employees with most of the banks having between 1-50 employees in the credit department. Out of these employees at the credit department majority had a training in professional area like CPA, ACIB, and professional qualification in banking this showed a clear indication that most banks showed a need of employing qualified staff in the credit department.

The study established that most banks offer a combination of services so that to satisfy their customers but a higher percentage of banks offered credit to their customers. The study also clearly indicated that banks offered credit to different categories of clients that is to individual borrowers, government and business firms. Most banks offer credit to individual borrowers and they offered short term credit with a repayment of up to 12 months. The findings also indicated that there is evidence of credit rationing by commercial banks and the form of credit rationing utilized was that some of the borrowers get full credit but some do not get any credit at all.

The study established that most of the banks ration credit due to the information asymmetry it was clearly indicated that the banks lacked reliable information on the credit worthiness of the borrower and that they incurred a high cost of obtaining information on borrowers and investments and therefore they rationed credit to reduce the cost of obtaining information. The banks found it expensive to explore the credit worthiness of borrowers before extending credit and afterwards monitoring the borrower. Some of the banks also rationed credit because of their unfamiliarity with the local economy and the business environment.
The study established that most of the banks rationed credit in order to reduce risk and to avoid the risk of adverse selection and moral hazard. At high interest rates the risk of adverse selection rises because borrowers with high repayment probabilities drop out and are replaced by those with high default risk. The findings indicated that increasing rates increases the riskiness of the bank loans portfolio by increasing the probability of adverse selection and moral hazard hence decreasing the bank profits. The study established that for most banks it was somewhat important to ration credit because of the high cost of preparing and enforcing loan contracts and there was lack of legislation to promote information disclosure. Research findings indicated that this factor influenced credit rationing.

The study established that 68% of the banks considered the level of debt in the borrower’s capital structure before giving credit. This is a clear indication that this was an important factor influencing credit rationing by commercial banks. The study found out that the 72% of the banks considered the amount of collateral when giving credit. If the borrower has sufficient collateral then the bank will not ration credit to the borrower. This clearly indicated that the amount of collateral is a very important factor when giving credit. The study established that 76% of the banks did not ration credit because other banks were doing so. This clearly indicates that this was not an important factor at all according to the findings. The study found out that some banks established that there are other factors which influence credit rationing and this factors are, past performance of the loan given to the borrower, policy uncertainty, reputation, bank size, geographic location of borrower relative to the bank, and to gain comparative advantage.

The study also established that some banks extended credit despite them returning a negative risk/return profile. The reasons which were clearly indicated from the findings which make banks to extend credit is that if the borrowers provided collateral which will cover the loan incase of any default then they were given credit. Another reason is that loyal borrowers were given credit despite them having a negative risk return profile because most of them transacts with the banks regularly.
5.3 Conclusion

The purpose of this study was to establish the factors that influence credit rationing in Kenya.

The study sought to achieve the following objectives:

The first objective was to determine how legal constraints influence credit rationing by commercial banks. The findings revealed that legal constraints were an important factor influencing credit rationing by commercial banks. Majority of the respondents reported that among the legal constraints were lack of legislation to promote information disclosure, to comply with government directive on priority and high cost of preparing and enforcing loan contracts. This factor was important in influencing the decisions on credit rationing.

The second objective was to find out how information asymmetry influences credit rationing. The findings revealed that majority of the banks rationed credit because of information asymmetry. Majority of the respondents indicated that lack of reliable information on credit worthiness of the borrower, unfamiliarity with local economy and business environment and high cost of obtaining information made the banks to ration credit.

The third objective was to investigate how cost of borrowing influences credit rationing. The findings indicated that most banks rationed credit in order to reduce risk and to avoid risk of adverse selection and moral hazard and limited technical capacity to monitor higher credit activity. This indicates that the cost of borrowing has an important effect on the decisions of rationing by the commercial banks.

The fourth objective was to establish how level of debt in borrowers capital structure influences credit rationing. The findings indicated that most banks considered the level of debt in the borrower’s capital structure if the borrower’s level of debt is high then the bank rations credit to such borrowers. This indicates that it is an important factor the bank considers.

The fifth objective was to investigate how herding behavior influences credit rationing. The findings revealed that most of the banks did not ration credit because other banks were doing so. This indicates that this was not an important factor which influences credit rationing by commercial banks.
5.4 Recommendations

On the basis of the findings of the study, the following recommendations can be made,

- There should be reform of the legal system to enhance the enforcement of financial contracts. This would work as an incentive for banks to invest in information capital, thus reducing the information asymmetry problem. Consequently the proportion of non-performing loans will be reduced hence lower risk premium attributed to credit risk.

- That it is beneficial for banks to ration credit but it should be done with professionalism and with no biasness.

- Efforts should be made to revitalize the growth of the economy and to attain macro stability in order to increase the return on investment and reduce uncertainty.

- Factors that influence rationing of credit should be evaluated thoroughly by the person in charge and given priority before issuing credit.

- There is need for policy measures to increase access of credit; this can be achieved through the establishment of credit insurance schemes that protect the banks against default risk which results from credit rationing.

- Banks should find out more about credit rationing and how it can contribute to their business growth.

- The banks should not ration credit to credit worthy borrowers instead they should find reliable information on the credit worthiness of the borrowers.

- It is important for the banks to ration credit because it will minimize the risk of default.
5.5 Limitations of the study

There were few limitations to the study

- Most of the bankers were reluctant to participate in the research and had to be really convinced that it was only an academic exercise.
- The study might have yielded more information had the response rate been higher however the conservative nature of some banks caused them to refuse to participate.
- There was time constraint in carrying out the research; most credit managers or senior credit officers who were the target for the questionnaires were very busy most of the time to fill them.

5.6 Suggestions for further research

Research should be carried out on the following areas:

- Research on the effect of credit reference Bureau reports on credit rationing in the banking industry.
- Research on the weaknesses in the legal, regulatory and infrastructure framework of financial system that should be addressed in order to enhance efficiency of credit allocation to credit rationed borrowers.
- Research on the impact of credit rationing on the financing and investment decisions on firms in Kenya.
REFERENCES


### APPENDIX I: LIST OF COMMERCIAL BANKS IN KENYA

<table>
<thead>
<tr>
<th>No</th>
<th>Large (Assets above 15 billion)</th>
<th>Total Net Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kenya Commercial Bank Limited</td>
<td>172,384</td>
</tr>
<tr>
<td>2</td>
<td>Barclays Bank of Kenya Ltd</td>
<td>165,151</td>
</tr>
<tr>
<td>3</td>
<td>Standard Chartered Bank (K) Ltd</td>
<td>123,909</td>
</tr>
<tr>
<td>4</td>
<td>Co-operative Bank of Kenya Ltd</td>
<td>110,531</td>
</tr>
<tr>
<td>5</td>
<td>CFCStanbic Bank Ltd</td>
<td>97,337</td>
</tr>
<tr>
<td>6</td>
<td>Equity bank</td>
<td>96,512</td>
</tr>
<tr>
<td>7</td>
<td>Commercial Bank of Africa Ltd</td>
<td>57,372</td>
</tr>
<tr>
<td>8</td>
<td>National Bank of Kenya Ltd</td>
<td>51,404</td>
</tr>
<tr>
<td>9</td>
<td>Citibank N.A. Kenya</td>
<td>51,372</td>
</tr>
<tr>
<td>10</td>
<td>Diamond Trust Bank Ltd</td>
<td>47,147</td>
</tr>
<tr>
<td>11</td>
<td>NIC Bank Ltd</td>
<td>44,655</td>
</tr>
<tr>
<td>12</td>
<td>I&amp;M Bank ltd</td>
<td>44,009</td>
</tr>
<tr>
<td>13</td>
<td>Prime Bank Ltd</td>
<td>21,970</td>
</tr>
<tr>
<td>14</td>
<td>Bank of Baroda (K) Ltd</td>
<td>21,970</td>
</tr>
<tr>
<td>15</td>
<td>Housing finance company ltd</td>
<td>18,281</td>
</tr>
<tr>
<td>16</td>
<td>Bank of Africa Kenya Ltd</td>
<td>16,920</td>
</tr>
<tr>
<td>17</td>
<td>Bank of India</td>
<td>15,395</td>
</tr>
<tr>
<td>18</td>
<td>Imperial Bank Ltd</td>
<td>15,358</td>
</tr>
</tbody>
</table>

**Medium (Assets above 5 billion and below 15 billion)**

<table>
<thead>
<tr>
<th>No</th>
<th>Bank Name</th>
<th>Total Net Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Eco bank Kenya ltd</td>
<td>13,949</td>
</tr>
<tr>
<td>2</td>
<td>Family Bank Ltd</td>
<td>13,306</td>
</tr>
<tr>
<td>3</td>
<td>Chase Bank Ltd</td>
<td>12,970</td>
</tr>
<tr>
<td>4</td>
<td>Fina Bank Ltd</td>
<td>12,297</td>
</tr>
<tr>
<td>5</td>
<td>African Banking Corporation Limited</td>
<td>8,841</td>
</tr>
<tr>
<td>6</td>
<td>Development Bank of Kenya</td>
<td>8,136</td>
</tr>
<tr>
<td>7</td>
<td>Gulf African Bank Ltd</td>
<td>7,749</td>
</tr>
<tr>
<td>8</td>
<td>Habib Bank A.G. Zurich</td>
<td>7,339</td>
</tr>
<tr>
<td>9</td>
<td>K-Rep Bank Ltd</td>
<td>7,136</td>
</tr>
<tr>
<td>Rank</td>
<td>Bank Name</td>
<td>Assets (Billion)</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>10</td>
<td>Giro Commercial Bank Ltd</td>
<td>6,914</td>
</tr>
<tr>
<td>11</td>
<td>Consolidated Bank of Kenya</td>
<td>6,899</td>
</tr>
<tr>
<td>12</td>
<td>Guardian Bank Ltd</td>
<td>6,778</td>
</tr>
<tr>
<td>13</td>
<td>Fidelity Commercial Bank limited</td>
<td>5,499</td>
</tr>
<tr>
<td>14</td>
<td>Victoria Commercial Bank Ltd</td>
<td>5,130</td>
</tr>
</tbody>
</table>

**Small (Assets below 5 billion)**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Bank Name</th>
<th>Assets (Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Habib Bank Ltd</td>
<td>4,659</td>
</tr>
<tr>
<td>2</td>
<td>Southern Credit Banking Corporation Ltd</td>
<td>4,491</td>
</tr>
<tr>
<td>3</td>
<td>Equatorial Commercial Bank Ltd</td>
<td>4,466</td>
</tr>
<tr>
<td>4</td>
<td>First community bank ltd</td>
<td>4,452</td>
</tr>
<tr>
<td>5</td>
<td>Credit Bank</td>
<td>3,655</td>
</tr>
<tr>
<td>6</td>
<td>Transnational Bank Ltd</td>
<td>3,364</td>
</tr>
<tr>
<td>7</td>
<td>Middle East Bank (K) Ltd</td>
<td>3,141</td>
</tr>
<tr>
<td>8</td>
<td>Paramount universal Bank Ltd</td>
<td>3,100</td>
</tr>
<tr>
<td>9</td>
<td>Oriental Commercial Bank Ltd</td>
<td>3,052</td>
</tr>
<tr>
<td>10</td>
<td>Dubai Bank Kenya Ltd</td>
<td>1,596</td>
</tr>
<tr>
<td>11</td>
<td>UBA Kenya Bank Ltd</td>
<td>1,216</td>
</tr>
<tr>
<td>12</td>
<td>City Finance Bank Ltd</td>
<td>491</td>
</tr>
</tbody>
</table>
APPENDIX III: Questionnaire

Instructions: Please tick appropriately

1. Name of commercial Bank (Optional).

2. Designation.

3. Indicate the number of staff according to the scale below

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>1 - 50</td>
<td>51 - 100</td>
<td>101 - 150</td>
<td>151 - 200</td>
<td>201 and Above</td>
</tr>
</tbody>
</table>

   a. Number in the entire Bank

   b. Number in credit department

   c. Number of professionals in credit department

(Professionals refer to those with qualifications mentioned in ii below)

4. Among the professionals in the credit department, indicate by ticking their professional qualifications.

   Bachelor’s degree (commerce etc)

   Certified public accountant (CPA)

   Banking (ACIB, AKIB etc)

   Certified financial Analyst

   Any other professional qualification possessed

5. What type of services do you offer? Tick as appropriate

   Credit provision
Savings and deposit taking [ ]
Consultant / advisory services [ ]
Trade finance [ ]
Other major services (please specify) .................................................................

6. Tick the category of clients you lend to and indicate the proportion of the total using the following

Scale
1. 0-10%
2. 11-20%
3. 21-30%
4. 31-40%
5. 41-50%
6. 51-60%
7. 61-70%
8. 71-80%
9. 81-90%
10. 91-100%

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual borrowers</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Groups of people</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Government</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Business firms/organizations</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Agricultural sector</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Manufacturing borrowers</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>
7. Indicate the type of credit facilities offered to borrowers and detail of each

<table>
<thead>
<tr>
<th>Type of credit</th>
<th>Repayment period</th>
<th>Proportion of total credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term credit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium term credit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term credit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Does your bank ration credit?

Yes [ ] No [ ]

9. If yes indicate the form of credit rationing used. Tick as appropriate

- Some of borrowers get full credit applied for but others do not get at all [ ] [ ]
- Credit is extended but is less than the borrower would like. [ ] [ ]
- Borrowers willing to pay a higher interest rate are given first priority [ ] [ ]

10. If your bank does not ration credit, give reasons why? (Tick as appropriate)
11. Please indicate against the reasons for credit rationing below in the order of importance considered.

<table>
<thead>
<tr>
<th>Reason</th>
<th>very important</th>
<th>Important</th>
<th>Somewhat important</th>
<th>Not important at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In order to reduce credit risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Limited management capacity to monitor higher credit activity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Compliance to government directive on priority</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Lack of reliable information on credit worthiness of borrowers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. High cost of obtaining information on borrowers and investment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. High cost of preparing and enforcing loan contracts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. To reduce cost of obtaining information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Lending practices observed by other banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Question</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>9</td>
<td>To avoid the risk of adverse selection and moral hazard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Unfamiliarity with the local economy and business environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Lack of legislation to promote information disclosure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Amount of debt in borrower capital structure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Amount of collateral</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Please indicate any other factor explaining why your bank rations credit

[ ]

13. Do you sometimes extend credit to borrowers despite returning a negative risk/return profile?

Yes [ ] No [ ]

If yes, give reasons

[ ]

[ ]

[ ]
# RESEARCH BUDGET

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Item</th>
<th>Quantity</th>
<th>price per Unit</th>
<th>Budget(ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stationery</td>
<td>5</td>
<td>400</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Printing</td>
<td>400</td>
<td>5</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Transport</td>
<td></td>
<td></td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Telephone costs</td>
<td></td>
<td></td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Miscellaneous</td>
<td></td>
<td></td>
<td>5,000</td>
</tr>
<tr>
<td></td>
<td>Sub total</td>
<td></td>
<td></td>
<td>13,000</td>
</tr>
<tr>
<td><strong>Final Project</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stationery</td>
<td>10</td>
<td>400</td>
<td>4,000</td>
</tr>
<tr>
<td></td>
<td>Printing</td>
<td>1,000</td>
<td>5</td>
<td>5,000</td>
</tr>
<tr>
<td></td>
<td>Transport</td>
<td></td>
<td></td>
<td>4,000</td>
</tr>
<tr>
<td></td>
<td>Data Collection</td>
<td></td>
<td></td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>Telephone Costs</td>
<td></td>
<td></td>
<td>5,000</td>
</tr>
<tr>
<td></td>
<td>Miscellaneous(10% of contingencies)</td>
<td></td>
<td></td>
<td>5,000</td>
</tr>
<tr>
<td></td>
<td>sub total</td>
<td></td>
<td></td>
<td>38,000</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>51,000</strong></td>
</tr>
</tbody>
</table>

N/B: The above Budget will be financed by the researcher.
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TIME IN WEEKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot Testing</td>
<td></td>
</tr>
<tr>
<td>Data collection</td>
<td></td>
</tr>
<tr>
<td>Data editing and coding</td>
<td></td>
</tr>
<tr>
<td>Data entry</td>
<td></td>
</tr>
<tr>
<td>Data analysis</td>
<td></td>
</tr>
<tr>
<td>Report writing</td>
<td></td>
</tr>
<tr>
<td>Submission</td>
<td></td>
</tr>
</tbody>
</table>