# DETERMINANTS OF LENDING TO FARMERS BY COMMERCIAL BANKS IN KENYA

BY

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# DECLARATION

I hereby declare that this project is my own work and effort and that it has not been submitted anywhere for any award.

Signature: …………………………………  Date: …………………

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D61/73023/2012

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

**SUPERVISOR:**

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The staff of the Jomo Kenyatta Library of the University of Nairobi provided the opportunity to use the facilities especially in the MBA and the Electronic Library section. I was able to access research reports from earlier MBA research findings and scholarly publication from the wider academic sphere.

Much of the direction from the generation coming up with the research idea, to its conceptualization, to the drafting of the research proposal, to the analysis and preparation of the report was provided by my able supervisor Mr. Mirie Mwangi.

In my literature review I have cited quite a lot of scholarly publication. Some are from earlier research finding from project done by other MBA students. I have used scholarly papers from the wider academia. These are works without which I could not have had a scholarly insight into this research

Finally I would wish to thank my family for their constant encouragement throughout the period I was conducting this research.

# DEDICATION

For my family
For the love and the faith he had in me

# ABSTRACT

Kenya is an agriculture based country and there is a lot of interest in the financing activities in this vital sector. The explanation provided by theory that there is connection between lending policy and issues like credit standards; assessment of return on credit; and assessment of risk on credit to farm may not be universal to all sector or countries. This research was, therefore, designed to find out the determinants of lending to farmers by commercial banks in Kenya. The study was conducted through a survey using self administered structured questionnaires delivered to commercial banks in Kenya.

The respondents were required to provide an assessment of their lending policy to farmers vis-a-vis their policies on Credit Standards with Regard to Farmers; their Assessment of Return on Credit to Farmers; and their assessment of Risk on Credit to Farmers. The results indicate that banks give out loans to finance farming activities and that farmers have reliable sources of income that enable them to pay back their loans in time. The results show that Credit Standards Credit Standards Regard to Farmers negatively affected lending to farmers. The research has also found that Return on Credit to Farmers negatively affected lending policy to farmers. Further, Risk on Credit to Farmers negatively affected lending to farmers. This indicates that Credit Standards with Regard to Farmers; Return on Credit to Farmers; and Risk on Credit to Farmers reduces the amounts provided to the farmers in Kenya. Factors such as the location of the financial institution, loan size extended to farmers, interest rates charged on credit to farmers affect lending to farmers by commercial banks.

Based on the findings and the conclusions of this study, it is recommended that policies should be designed to ensure that the income from farmers in Kenya is stabilized to mitigate risk and improve their creditworthiness. Policies should also put in place to ensure that farmers have skills to manage their finances properly to maintain excellent financial records with banks. Policies should be put in place to help banks relax their credit qualification for farmers so as to stimulate the demand and supply of credit.

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| | | |
|---|---|---|
| ACRF | - | Credit Standards to Farmers |
| ADB | - | African Development Bank |
| COMESA | - | Common Market for Eastern and Southern Africa |
| FSD | - | Financial Sector Deepening |
| GDP | - | Gross Domestic Product |
| LPF | - | Lending Policy to Farmers |
| RCF | - | Risk on Credit to Farmers |
| ACR | - | Assessment on Credit to Farmers |
| SMEs | - | Small and Medium Enterprises |
| SPSS | - | Statistical Package for Social Sciences |
| USA | - | United States of America |
| USAID | - | United States Agency for International Development |

# CHAPTER ONE

# INTRODUCTION

## 1.1  Background of the Study

A key development challenge over decades has been to increase agricultural productivity. One constraint facing farmers is lack of access to formal sector credit to enable them to take advantage of economic opportunities to increase their level of output, hence move out of poverty. Small scale farmers and the rural poor have been concerned about the design of various financial sector policies. Agricultural finance is dedicated to financing agricultural related activities such as; input supply, production, processing and distribution (Meyer *et al.,* 2004). Small loans to rural farmers, rarely justify the costs of legal action to call in a claim on land and then liquidate it. Similarly, movable assets such as livestock and equipment are also fairly high risk without proof of ownership and insurance cover. Consequently, access to credit by farmers is subject to lending terms of the banks and information asymmetry (Kasekende & Opondo, 2003; Kayizi, 2003). Proper information sharing between banks and the borrowers can reduce risks and increase access to credit by allowing banks screen borrowers at a lower cost. However, due to lack of accurate information about individuals or firms and their financial background, the banking industry finds it hard to select a good client.

A lender in finance is defined as any person or organization engaged in the business of making consumer loans or commercial loans. These loans may be unsecured, secured by personal property real property or a combination of real and personal property. Lending then refers to the activity or business of making consumer and

commercial loan products. O'Donoghue, Hoppe, Banker & Korb (2009) defined a farm as any establishment that produced agricultural goods for commercial purposes. Farms can be small commercial farm business owned by one household or very large farms that often have multiple stakeholders, including some owners or shareholders who may provide substantial capital, but little on-farm labour or management. The owners of these businesses that produce agricultural products for sale are the farmers.

Lending activities of various commercial banks depend on the willingness to extend much credit to some sector of the economy. According to Nwankwo (2000) credit is the largest single income-earning asset in the portfolio of most commercial banks. Banks are, therefore, forced to spend enormous resources to estimate, monitor and manage credit. This greatly affects the lending behaviour of commercial banks due to the large resources involved.

Chodechai (2004) acknowledges that commercial banks have to be careful with their lending prices as they cannot charge loan rates that are too low or too high. Too low rates might lead to a level of interest income that may not be enough to cover the cost of deposits, general expenses and the losses from some borrowers that do not pay. Charging too high loan rates in the other hand may create adverse selection issues and moral hazard problems for borrowers.

Gine et al, (2009) argue that access to financial services can improve commercialization of smallholder agriculture and contribute to poverty alleviation among rural communities. The paper asserts that more than seventy percent of Africa's population is rural and experiences high incidence of poverty. A major

portion, if not all, of these rural folks depend on agriculture for their livelihood. There is, therefore, need to tailor financial products for these people to stimulate higher productivity in their farming activities as a channel of achieving pro-poor growth and poverty reduction. However, formal financial markets fail in the provision of funding to the majority of smallholder farmers in developing countries (World Bank 2009).

### 1.1.1  Lending to Farmers by Commercial Banks

Commercial banks are the most important savings, mobilization and financial resource allocation institutions. These roles make them an important part of economic growth and development. In performing this role, commercial banks can mobilize financial resources and efficiently allocate them to productive investments. Irrespective of the economic policies of a country, commercial banks are interested in lending to numerous customers bearing in mind profitability, liquidity and solvency. However, the decisions to lend by commercial banks are influenced by a lot of factors. These factors include: the prevailing interest rates, the volume of deposits, the level of their domestic and foreign investment, their liquidity ratio, prestige and public recognition (Olokoyo, 2011).

Increased competition by commercial banks has brought about a more aggressive marketing approach as they compete for the existing customers in an environment that is increasingly being filled by bad debts and more risk (Osayameh, 1991). This situation is made more difficult by small-scale farmers who depend on informal financial systems which are poorly developed and the high transaction costs (Poulton et al, 2006). Further, higher covariate risks, market risks and the lack of suitable collaterals hamper the extension of credit to the small-scale farmers (Onumah, 2002).

Poor communication and transportation facilities, lack of production and market information, as well as the thin and segmented markets provide a challenge to commercial banks (Shiferaw, 2009).

Development of the private sector holds the key to future agricultural and overall economic growth in many world economies. Unfortunately, in Africa private sector lacks capacity because it is relatively young and constrained by the weak economies. The investment climate is unpredictable due to lack of the necessary public and institutional infrastructure, weaknesses in the legal and regulatory environment, and the dominance of the public sector. This has crowded out private sector activity and discouraged the use of domestic savings for domestic investment, especially in agriculture (ADB, 2000).

The agricultural sector in any country plays an important role in its economic growth and development through the contributions made to wealth creation, employment, food production, and income generation. Many farmers in Kenya, however, still find it difficult when it comes to accessing credit from the formal financial institutions. This has hampered their desire to increase performance through modern farming. This inaccessibility to formal financing has led to poor growth and sometimes decline in agricultural productivity over the past years (Othieno, 2010). It is therefore expected that there is a positive relationship between lending to the private sector and lending by commercial banks. However, the lending is highly dependent on factors like profitability, liquidity, solvency, information asymmetry and availability of money for lending. With respect to farmers, lending to farmers policy is expected to be affected

by the standard of credit to farmers, the credit terms for farmers and the recollection policy of loans to farmers (Olokoyo, 2011).

## 1.1.2 The Farming Sector

Access to credit is a major and complicated challenge in the agriculture sector. Commercial banks have the need to link their future profitably with the growth of lending to the agricultural segment. This means making agricultural lending a significant integral part of each of the commercial banks' growth strategy. Banks fail to appreciate the potential of the agriculture sector and the problems and realities related to production, products, and the political and economic organization of the value chain (USAID, 2012).

The agricultural sector is composed mainly of primary producers of small size, where the risks are greatest because primary producers have the least negotiating ability among the players in their industry making them mere price takers. The sector is also characterized by inefficient use of resources like water, fertilizer and land leading to low productivity. This sector is susceptible to environmental shocks like changes in weather patterns. Production is too small leading to inability to achieve economies of scale (Parthasaraty, 2001).

The agriculture sector is very capital intensive with low return on investment necessitating long term financing. The sector is a highly knowledge-based sector; rural based with slowly improving poor physical infrastructure. Even the introduction of new technology and new techniques is slow, coupled with lack of attention to financial literacy and to good business management. Its adaptation to changing market

conditions on the supply side is also slow (Beck, Demirgüc, Laeven, & Maksimovic, 2006).

### 1.1.3  Commercial Banks in Kenya and the Farming Sector

Nott (2003) argued that adequate and timely information enables lenders to set loan terms accordingly. Failure to exchange information between the lender and the borrower brings about information asymmetry between the two parties, and to address this problem, lenders limit their credit facilities to sectors which they perceive to possess limited information asymmetry (Stiglitz & Weiss, 1981).

In addition, to compensate for the high information asymmetry risks, lenders tend to charge higher interest rates, and lend for a short time period, hence constraining credit affordability. They also ask for collateral, limit the loan amount, and in most cases banks are located in urban centres which further limit credit accessibility by rural farmers. Become inefficient and forces market participants to take risks because it is assumed that information that is provided is always inadequate and untimely (Constantiu, 2001). In financial markets, information asymmetry arises between borrowers and lenders because borrowers generally know more about their projects than lenders do.

Information asymmetry entails absence of accurate, timely, complete, quantity and quality information about the borrowers' ability and willingness to pay back the loan (Nott, 2003). According to Kenneth & Adrian (1997), the bank's decision to lend is often complicated by inadequate and inaccurate information. In the quest to screen out borrowers likely to default, banks need information. Although banks demand that

borrowers disclose all the required information, borrowers often conceal information that is likely to work in their favour. It is therefore necessary to develop methods of evaluating the volume and quality of financial and non financial information given by farmers.

## 1.2  Research Problem

According to Stiglitz & Weiss (1981) and Chodechai (2004) commercial banks' lending policy is closely related to the interest rate they charge and the interest rate is set in order to avoid adverse selection issues. In another approach Radevic & Ahmedin (2010) argue that commercial banks are either encouraged or discouraged to lend depending on the collateral provided. This is because the level of collateral is a signal of the level of risk of the borrower. Ewert et al (2000) on the other hand argues that the level of demand for credit will determine how much credit banks will offer and the interest rate is set just to enable clearance of the credit market. Collateral is considered irrelevant.

In Kenya, the expansion and improvement of the productivity of the agriculture sector is one of the key drivers of the realization of the development goal. Farming is believed to be a generator of employment directly and indirectly while ensuring food security for Kenyans. However, there seems to be financing issues in this sector especially with regard to formal financing. To reorganize financing to this key sector, it is important that the factors that determine lending to this sector in Kenya are discovered to be used as input when designing financing policy (Othieno, 2010).

Theoretical approaches given by Stiglitz & Weiss (1981), Chodechai (2004), Radevic & Ahmedin (2010) and Ewert et al (2000) don't seem to agree on what issues determine commercial bank lending in general, let alone lending to the farmers. Kenyan studies by Ndung'u, (2003), Nguthuku (2008) and Munyiri (2010) focused on factors determining profitability in the formal banking sector which does not effectively lend to farmers. Earlier studies by Wanjiru (2000) and Rukwaro (2000) studied micro finance institutions focusing on credit rationing and its influence on the operations of small and micro enterprises.

The agricultural sector in Kenya plays an important role in the economic growth and development. Farmers in Kenya however, still experience difficulties in accessing credit from the formal financial institutions to increase their performance through modern farming. A study has not been done to investigate factors determining lending to farmers by commercial banks in Kenya. The study therefore, seeks to find out the determinants of lending to farmers by commercial banks in Kenya, and how they affect the performance of farmers

## 1.3 Research Objective

This study aimed at establishing the determinants of lending to farmers by commercial banks in Kenya.

## 1.4 Value of the Study

This study is significant to scholars and future researchers, banks, government policy makers and investors in the agricultural sector. Lending to any sector in the economy

is a dynamic issue dependent upon the environment within which it is done. The research gap identified in this study concerns there not being an up to date study concerning the determinants of lending to this sector by commercial banks. This study will fill that research gap and enable future researchers to get the latest information that will be used to enhance their arguments concerning lending to the farming sector. Banks will benefit from this study since it will provide objective and well researched findings concerning determinants that drive lending to the farming sector across the commercial banking sector. The main drivers will then be used as input to tailor products that will meet the specific needs of the farmers while ensuring the bottom line for the commercial bankers.

The policy makers of the government will find this study useful as an input into their policy designing. To become a middle income country by the year 2030 requires the commercialization of the agricultural sector as a food production sector in addition to being a provider of employment. To come up with accurately made policies, this study will provide accurate and most recent findings concerning determinants of lending by commercial banks to this sector. These findings can then be used in designing of policies to stimulate performance of the agricultural sector.

Due to this study, the policies designed will target and be beneficial to the investors in the farming sectors. Putting in place policies to improve the sector is a critical factor that directly touches the investors in the farming sector-be they farmers or otherwise. In that respect, this study will be of significance to farmers and other investors in the agricultural sector.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1    Introduction

This chapter provides the literature review of this study. The chapter discusses three theories behind performance of firms after demergers. These theories are: loan pricing theory, signalling theory and credit market theory. The chapter also discusses past empirical studies concerning the demergers and their effect on profitability.

## 2.2    Review of Theories

## 2.2.1  Loan Pricing Theory

Banks cannot always set high interest rates, e.g. trying to earn maximum interest income. Banks should consider the problems of adverse selection and moral hazard since it is very difficult to forecast the borrower type at the start of the banking relationship (Stiglitz & Weiss, 1981). If banks set interest rates too high, they may induce adverse selection problems because high-risk borrowers are willing to accept these high rates. Once these borrowers receive the loans, they may develop moral hazard behaviour or so called borrower moral hazard since they are likely to take on highly risky projects or investments (Chodechai, 2004).

This theory is related to this study because it explains why it is not wise for banks to set very high interest rates with the goal of optimizing profit from loan sales to farmers and other investors. If banks set up very high interest rates, it could encourage

the problem of adverse selection and moral hazard by attracting borrowers with very risky projects (Karumba & Wafula, 2012).

## 2.2.2 The Signalling Theory

The signalling argument states that good companies should provide more collateral so that they can signal to the banks that they are less risky type borrowers and then they are charged lower interest rates. Borrowers who give less collateral for their financing indicate higher levels of risk. Firms giving higher collateral, therefore, will be charged low interest rates while those that offer low collaterals will be charged higher interest rates (Chodechai, 2004).

Meanwhile, the reverse signalling argument states that banks only require collateral and or covenants for relatively risky firms that also pay higher interest rates. This counter theory postulates that firms perceived to be less risky will required to pledge low or not premium as opposed to firms perceived to be more risky (Chodechai, 2004).

This theory is related to this study because it indicates that the nature of the collateral given by farmers when applying for credit from commercial banks is a sign of the risk level in the sector. This, therefore, provides a possible explanation that commercial banks are either encouraged or discouraged to lend to the farmers depending on the signal given by their collateral (Radevic & Ahmedin, 2010).

## 2.2.3  Credit Market Clearing Theory

This theory is also called the neoclassical credit market model. This theory postulates that it is the lending rate that determines the amount of credit that is dispensed by the banking sector to clear the credit market. If collateral and other restrictions remain constant, the interest rate is the only price mechanism. An increase in demand for credit and customer supply leads to an increase in interest rate while a reduction in credit demand will reduce interest rates. There exist a positive relationship between the default probability of a borrower and the interest rate charged on the advance (Ewert et al, 2000).

Though this theory does not explicitly discuss how collateral impact on the risk premium, it creates the impression that collateral has no effect on lending rate, and if a risky borrower would wish to face the same lending rate as a borrower with a lower risk, then all that is required is to pledge more collateral to lower his risk profile and therefore enjoy a lower risk premium. This brings about the moral hazard and adverse selection phenomena, firstly because of information asymmetry existing between the lender and borrowers (Karumba & Wafula, 2012).

This theory is related to this study because it explains risk as one of the factors that may affect lending to farmers. If the risk level in the farming sector is high, then they will have to pay higher risk. The higher interest is due to the commercial banks requiring protection against the arising losses (Panagopoulos & Spiliotis, 1998).

## 2.3 Factors Determining Commercial Banks' Lending to Farmers

### 2.3.1 Information Quality and Quantity

According to O'Brien (1996), information is the degree of information content, form and time characteristics that give it value to specific individuals and users. Stiglitz, et al., (1981) observed that information asymmetry can be measured on the basis of information quality and quantity, where quantity is the adequacy of information according to the perception of the receiver. The quality of information is determined by the level of its completeness, correctness, and the impartiality with which it is collected. The more accurate it is the higher the quality. Information is of good quality if it is reliable, timely, complete, fair and consistent, and presented in clear and simple terms, relevant and understandable to its users.

Information quality can be enhanced through increased information disclosure. Increased information disclosure has an incentive of reducing information search costs and promotes informed lending practice. Information sharing avails more information to parties involved which further reduces on the risks of information asymmetry. In developed countries, credit bureaus collect information from various sources and provide such records as the repayment behaviours of individuals and firms for a variety of uses, thereby reducing information asymmetries so lenders are able to screen borrowers at a lower cost. As a result, lenders can make credit decisions faster and reduce risks, hence increasing lending. The quality and quantity of information desired by banks in most developing countries is still low and hence complicating sound decision making, (Tara & Kaufmann 1999).

## 2.3.2  Credit Accessibility

Credit was defined by Ellis (1992) as a sum of money in favour of the person to who control over it is transferred, and who undertakes to pay it back. According to Penchansky & Thomas (1981) access refers to entry into or use of something or to the factors influencing entry or use. Thus, access to credit may be referred to as, the right to obtain or make use of or take advantage of borrowed money from a lender. In a developing country context, credit is an important instrument for improving and enhancing the productivity capacity of any sector. It also facilitates the flow of savings from surplus units to deficit units (Diagne et al, 2000).

The outcome of this is that only a small proportion of the total number of rural households and farmers credit from the formal sector. Again among those with access to the institutional credit, a very small group particularly the rich and the elites in the village receive a very large share of the total amount disbursed. Consequently, the overwhelmingly constrained borrowers are forced to turn to the rather expensive and unreliable informal credit sources (Okurut et al, 2004).

## 2.3.3  Loan Size

When dealing with credit applications lenders are never sure about the extent to which applicants are honest in the information they provide. Lending presents credit risks that have to be mitigated either by giving reduced loan amounts that the lender feels the borrower can pay, or by totally rejecting the application. Even with granted applications the lender has to reduce default risks. Necessary precautions are put in place in case the borrower fails to pay (Akoten et al, 2006).

## 2.3.4 Location of Financial Institution

Location from Financial institutions and physical distance of farm households from formal lending institutions is one of the factors that influence access to formal credit. According to Hussien (2007) farm households are discouraged to borrow from bank if it is located farther. This is because both temporal and monetary costs of transaction, especially transportation costs, increase with lender-borrower distance which raises the effective cost of borrowing at otherwise relatively lower interest rate in the sector.

Similarly, few financial institutions are willing to grant loan applications from distantly located borrowers because of the high processing and monitoring costs. Long distances increase transaction costs which complicate the loan monitoring process and consequently creating moral hazard risks. Lasches (2001) observed that financial institutions outreach in Uganda is still dismal with an estimated 115, 000 persons per branch as compared to an average of 7,000 persons in the COMESA region.

## 2.3.5 Constraints of Credit Accessibility to Farmers

Diagne et al (2000) stated that a household is said to have access to a type of credit if at least one of its members has a strictly positive credit limit for that type of credit. Similarly, a household is classified as credit constrained for a type of credit if at least one of its members is constrained for that type of credit. Access to financial services by farmers is normally seen as one of the constraints limiting their benefits from credit facilities. However, in most cases the access problem, especially among formal financial institutions, is one created by the institutions mainly through their lending

policies. This is manifested in the form of prescribed minimum loan amounts, complicated application procedures and restrictions on credit for specific purposes (Schmidt & Kropp, 1987).

According to Buvinic & Berger (1990), women are frequently discriminated against in formal credit markets in developing countries. The belief in discrimination against women in formal credit markets, often based upon the limited number of women borrowers in the market, is perceived as an outcome of lenders' rejection of women's applications for loan contract. There appears to be two major factors which restrict women's access to formal credit more than men's; these are related to women's lack of control over economic resources and the nature of their economic activity.

Okurut (2006) noted that the rural poor farmers are excluded from the formal financial system due to the fact that formal banks are either unwilling or unable to serve farmers. These banks face high risk and transaction costs, difficulties in enforcing contracts, and penalization by the central bank for lending to enterprises that lack traditional collateral. They also lack reliable information on borrowers, appropriate information systems and instruments for managing risk.

## 2.4    Review of Empirical Literature

Donald (1976) did a study and concluded that for credit programs to be successful more than money is needed. There must be a new technology, markets that can supply additional inputs and absorb additional output, institutions willing to lend to small farmers on terms the farmers consider attractive and most important, the farmers willing to borrow, to invest and to repay loans. Previous programs' focus has been the provision

of credit and opportunity for saving mobilization in the rural areas that would enhance productivity and thus improve the social and economic welfare of the rural population. The place of credit in promoting enhanced productivity has been settled in the literature; however, the rural financial intermediation process poses its own peculiar problems. These include the suitability of the existing financial arrangements in the urban economy to rural financial needs. To be successful, Yaron (1994) postulates that rural financial institutions must fulfil two basic objectives. These are the objectives of financial self-sustainability and substantial outreach to the target rural population.

Poulton et al. (1998) studied smallholder cash-crop production in liberalized cotton and cashew markets in Ghana, Pakistan, and Tanzania. They investigated the difficulties farmers face in financing seasonal crop inputs and the mechanisms developed by private traders to supply seasonal credit. It emerged from the study that farmers' limited access to capital is a critical constraint on crop production. Also, the willingness and ability of the private sector to supply farmers with loans was limited by the high risk of default on loan repayments and the high cost of information on potential borrowers. Such costs were too high to be recovered by the low returns on the normally small loans taken out by farmers. In each country, it was found that "interlocking transactions" had been developed. "Interlocking transactions" are where traders sell inputs or they buy outputs at the same time as providing credit to some farmers. The traders thus simultaneously reduce the cost of obtaining financial information about their farmer customers and increase their volume of business and consequently their profits. Findings suggest that interlocking contracts could become an increasingly effective way of helping smallholder farmers gain access to seasonal credit. However, the system can be limited by a trader's lack of access to capital and if a farmer defaults on the loan repayments by

selling his output to another trader instead of the one who lent him money in the first place. Moreover, where traders operate some form of monopoly, they may exploit the "interlocking" system at the farmers' expense.

Ndung'u, (2003) conducted a study to identify determinants of profitability of commercial banks in Kenya. This study was based on a sample of seven local Kenyan commercial banks quoted on the Nairobi Securities Exchange over the period between 1993 and 2002. The study applied to a linear regression model to analyze the profitability determinants of the Kenyan commercial banks. The findings of this study revealed that sound asset and liability management had a significant influence on profitability. The study recommended that commercial banks should be prudent in providing credit for the financing of investments even in highly volatile sectors proper monitoring systems. This was evidence that profitability was a key driving issue in lending to any sector.

Pafula (2003) conducted a study whose aim was to explain loan portfolio performance of the two forms of commercial banks and micro-financial intermediaries. This study was a comparative study that investigated the relationship between loan operations (that is, policies and administration) and loan portfolio performance. Primary data from a sample of 102 respondents was collected using a self administered questionnaire. Information obtained was analyzed using regression and correlation analysis. Results of the study revealed a strong relationship between loan policies and loan administration. There was a strong negative relationship between loan appraisal and follow up action, strong negative relationship between loan appraisal and business sector outreach and positive relationship between follow up actions and business

sector outreach. This indicated that there was a connection between lending and loan recovery policies.

Lown & Morgan (2006) conducted a survey study to find out how bank lending standards related with lending innovation. The study surveyed opinions from lenders in the USA. In the study standards referred to any of the various non-price lending terms specified in the typical bank business loan or line of credit: collateral, covenants, loan limits, etc. Analysis was done using value at risk (VAR) model. The study revealed that shocks to lending standards were significantly correlated with innovations in commercial loans at banks and in real output.

Maddaloni, Peydró & Scopel (2008) conducted another study in Euro Area to establish whether monetary policy affected bank credit standards. The study was a comprehensive bank lending survey in the euro Area where there are time and cross-country variation of the standards of monetary. The study found robust evidence that lower overnight rates softened bank credit standards for both the average and the riskier loans. The softening of credit standards was over and above an improvement of the quality of borrower's industry and collateral. Banks especially soften their credit standards by reducing spreads on average loans, but also by reducing collateral requirements and covenants and by increasing loan amount and maturity. This study found that there is a relationship between credit standards and lending.

Nguthuku (2008) did another study that aimed at identifying the factors that had contributed to increased marketing activity by Kenya Commercial Bank. This study was a case study on Kenya Commercial Bank in which primary data was collected by

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means of a self administered questionnaire of 30 respondents selected from the staff of Kenya Commercial Bank by stratified sampling method. Results indicated that there are a lot of a lot of marketing activities being carried out by Kenya Commercial Bank driven by the desire to increase lending so as to gain higher profits.

Munyiri (2010) investigated lending policies and their effects on performance in commercial banks in Kenya. The objective of the study was to establish how lending policies affect commercial banks' performance in Kenya. The study was descriptive survey on 46 commercial banks in Kenya. Primary data was used for the study. The researcher used structured questionnaires as the main data collection instrument. Descriptive statistics was used to summarize the data. From the findings, the study concludes that lending policies formulated by the commercial banks effected bank performance through attracting and retaining customers increasing the bank customer base, increase shareholder's value, create customer satisfaction, create competitive advantage, reduce loan loss defaults and increase bank profitability. The study found that there was a relationship between bank lending policy and its profitability.

Dell'Ariccia, Igan & Laeven (2012) conducted a study to investigate the relationship between credit denial rates and lending prior to the financial crisis in the USA mortgage subsector. The study showed that lending standards were relatively lower in areas that experienced faster credit demand growth and that lenders in these high-growth areas attached less weight to applicants' loan-to-income ratios. The results were consistent with the notion that when lending standards are relaxed, it triggered an increased demand for loans, contributed to the credit boom before the ensuing crisis. These findings shed new light on the relationship between credit standards,

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credit booms and financial instability. As indicated by this study, tighter credit standards affected lending.

## 2.5    Summary to the Literature Review

Liberalization of the financial market and financial reforms should be applauded for a gradual increase in financial intermediation, this doesn't seem to have had significant impact to famers as seen from the agricultural sector's performance in terms of farm yields over the years; a situation which has seriously constrained the agricultural sectors' development and to a large extent floundered attempts to alleviate poverty in the country. The attitudes that characterize bank lending to farmers and the information gap between banks and farmers complicates credit accessibility by farmers thereby curtailing their productivity and profitability. Theoretical approaches given by previous studies don't seem to agree on what issues determine commercial bank lending in general, let alone lending to the farmers. Kenyan studies by focused on factors determining profitability in the formal banking sector which does not effectively lend to farmers. Other studies on micro finance institutions focused on credit rationing and its influence on the operations of small and micro enterprises. A study has not been done to investigate factors determining lending to farmers by commercial banks in Kenya, therefore this study will help to address the factors that contribute to lending to farmers by commercial banks in Kenya.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1    Introduction

This chapter outlines the general methodology used to conduct the study. The presentation focuses on the research design, target population, data collection method and how analysis of the data was done.

## 3.2    Research Design

This study is a descriptive research study that employed survey method. Pinsonneault & Kraemer (1993) posit that in a survey research the researcher focuses on collecting data from members of a population and describes an existing phenomenon by asking individuals about their perception, attitudes behaviour or values. In a survey, the researcher has to explore the existing status of variables at a given point in time. Primary data is usually collected from the population. The primary data collected is more reliable and up-to-date. Since such information is required for this study, this method is justified.

This descriptive survey is meant to enhance a systematic description that is as accurate, as valid and as reliable as possible regarding the responses on determinants of lending to farmers by commercial banks in Kenya.  The variables to be studied include lending to farmers policy, credit to farmers' standards, credit terms for farmers' and recollection policy of loans to farmers.

## 3.3    Population

The target population of this study comprised of commercial banks in Kenya (see Appendix I). The banks have their head offices in Nairobi hence it is possible to collect data from all the commercial banks.

## 3.4    Sample

All commercial banks in Kenya were eligible in the study. However a sample of 15 randomly selected banks was targeted to participate in this study. The head of marketing department per bank was the respondent to the self-administered questionnaire that was used for this study. This is because the marketing department has information concerning the issues to do with factors determining the performance of their financial products in the market.

## 3.5    Data Collection

The primary data were collected using self administered questionnaires. One questionnaire was sent to each of the marketing managers of the 15 commercial banks in the sample. The questionnaire to be used is in Appendix B. A 5-point Likert scale was used to determine the determinants of commercial banks lending to farmers in Kenya.  Closed ended questions enabled the research study to collect quantitative data while open-ended questions will be used to collect qualitative data. The data collected relate to the determinants of lending to farmers in the year 2012.

## 3.6    Data Analysis

The primary data collected using the questionnaires were compiled, sorted, edited, classified and coded, and analyzed using a computerized data analysis package SPSS. The mean and standard deviation were used to analyze which of the factors identified per variable least or most influenced lending decisions towards farmers. Pearson's correlation analysis was run to determine the existence and significance of the relationship between lending policy, credit standards to farmers, return on credit to farmers and risk on credit to Farmers.

Bank lending was measured by amount of the loan borrowed by farmers, interest rates, credit limits, and loan period in terms of the percentage rate charged by commercial banks, the amount of the loan borrowed by farmers, and months a borrower should have repaid the loan respectively. Credit standards to farmers was measured basing on the loan size, collateral requirements by banks and location of the borrowers from the bank in accordance with studies by Berger and Udell (2002; and Stiglitz and Weiss (1981).Loan size is based on the amount and number of loans a borrower can access, location is based on distance, and collateral on the legal ownership of property.

Return on credit to farmers was measured by return on equity (ROE), profitability of extending credit to the farmers and the amount of loans given to farmers. Risk on credit to farmers was measured by the loan recollection policy with regards to farmers, interest rates charged to  farmers and the levels of defaults experienced on credit to farmers

The regression model below was used to determine the relationship between lending policy to farmers and credit to farmers' standards, bank profitability and Farmers' loan recollection policy. Lending to farmers policy is the dependent variable while the independent variables are credit standards, credit terms and collection policy. Each of the variables $Y$, $X_1$, $X_2$ and $X_3$ will be the average of the respondent per bank.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where:

| | | |
|---|---|---|
| $Y$ | = | Lending to Farmers |
| $X_1$ | = | Credit standards to Farmers |
| $X_2$ | = | Return on credit to farmers |
| $X_3$ | = | Risk on credit to Farmers |
| $\beta_0$ | = | Intercept Term |
| $\beta_1, \beta_2, \beta_3$ | = | Sensitivity of Lending to farmers to the independent variables |
| $e$ | = | The error term |

The $t-statistic$ at 95% confidence level was used to measure the significance of the constants of regression, $\beta_0$, $\beta_1$, $\beta_2$, and $\beta_3$. The significance of the whole regression was tested using the $F-test$ at 95% confidence level. The strength of the level to which the three independent variables x1, x2 and x3 explain the variation in lending was assessed using the coefficient of determination $R^2$, and the Adjusted $R^2$.

# CHAPTER FOUR

# DATA ANALYSIS RESULTS AND DISCUSSION

## 4.1 Introduction

This chapter presents the data and provides the interpretation of the findings from the analysis. It presents data analysis ending with the determination of whether the ending is related to credit standards with regard to farmers¸ assessment of return on credit to farmers and assessment of risk on credit to farmers. The data is presented and then analyzed in comparison with other similar studies.

## 4.2 Analysis of Data and Presentation of Findings

### 4.2.1 Response  Rate and Data Reliability

The study targeted a sample of 15 banks that offered lending to farmers. However, only eleven completed the questionnaires and provided the data for analysis. This made a response rate of 73.33 %. The summary for each of the banks on each variable is presented in the table in Appendix III.

As given in Table 4.1 the Cronbach's Alpha for Lending Policy to Farmers was 0.78 which is acceptable. That of Credit Standards with Regard to Farmers was 0.81 which is good. That of Assessment of Return on Credit to Farmers was 0.87 which is good. The Cronbach's Alpha for Assessment of Risk on Credit to Farmers 0.82 which is good. The data collected can therefore provide reliable findings.

**Table 4.1: Reliability Analysis**

| Variable | Cronbach's Alpha | Remark |
|---|---|---|
| Lending Policy to Farmers | 0.78 | Acceptable |
| Credit Standards with Regard to Farmers | 0.81 | Good |
| Assessment of Return on Credit to Farmers | 0.87 | Good |
| Assessment of Risk on Credit to Farmers | 0.82 | Good |

**Source: Research Findings**

## 4.2.2    Descriptive Statistics

Table 4.2 shows the summary statistics of the responses to the variables in the questionnaire. The mean for Lending Policy to Farmers (LPF) was 2.85 ( = 0.68) indicating a slight disagreement with the lending policy. The maximum level of agreement with lending policy was 3.30 while the lowest score was 1.80. The mean score for Credit Standards with Regard to Farmers (CSRF) was 3.10 ( = 0.76) indicating slight agreement that lending policy was affected by Credit Standards with Regard to Farmers. The highest mean score was 2.00 indicating a disagreement that Credit Standards with Regard to Farmers affected lending policy to farmers while the highest mean score was 4.40 which was an agreement that Credit Standards with Regard to Farmers affected the lending policy to farmers.

The highest mean score for Assessment of Return on Credit to Farmers (ARCF) was 3.00 ( = 0.90) indicating neutrality to the effect of the Return on Credit to Farmers on the lending policy. The highest mean score was 4.40 which indicated an agreement

that Return on Credit to Farmers affected the lending policy. The lowest mean score was 1.60 which was a disagreement that Return on Credit to Farmers affected lending policy. The mean score for Assessment of Risk on Credit to Farmers (ACR) was 3.37 ($\sigma$ = 0.61) indicating a slight agreement that Risk on Credit to Farmers affected lending policy. The highest mean score was 4.70 which was a strong agreement that Risk on Credit to Farmers affected lending policy. The lowest mean score was 2.80 which was a disagreement that Risk on Credit to Farmers affected lending policy to farmers.

**Table 4.2: Descriptive Statistics**

| Variable | Mean | Minimum | Maximum | Std. Dev. |
|----------|------|---------|---------|-----------|
| LPF | 2.85 | 1.80 | 3.80 | 0.68 |
| CSRF | 3.10 | 2.00 | 4.40 | 0.76 |
| ARCF | 3.00 | 1.60 | 4.40 | 0.90 |
| ACR | 3.37 | 2.80 | 4.70 | 0.61 |

**Source: Research Findings**

### 4.2.3   Correlation and Regression Analysis

Table 4.22 presents the correlation between the four variables in this study. The values used in the regression were the averages of the responses per variable per bank. The summary of the averages are presented in Appendix IV. As shown there was strong positive correlation between Assessment of Return on Credit to Farmers and Assessment of Risk on Credit to Farmers, $r(11) = 0.57$. Weak positive correlation was found between Credit Standards with Regard to Farmers and Assessment of Return on Credit to Farmers, $r(11) = 0.01$ and between Credit Standards with

Regard to Farmers and Assessment of Risk on Credit to Farmers, $r(11) = 0.02$. Weak negative correlation was found: between Lending Policy to Farmers and Credit Standards with Regard to Farmers, $r(11) = -0.39$; between Lending Policy to Farmers and Assessment of Return on Credit to Farmers, $r(11) = -0.16$; and between Lending Policy to Farmers and Assessment of Risk on Credit to Farmers, $r(11) = -0.27$.

**Table 4.3: Correlation Matrix**

|  | LPF | CSRF | ARCF | ACR |
|---|---|---|---|---|
| **LPF** | 1.00 | -0.39 | -0.16 | -0.27 |
| **CSRF** |  | 1.00 | 0.01 | 0.02 |
| **ARCF** |  |  | 1.00 | 0.57 |
| **ACR** |  |  |  | 1.00 |

**Source: Research Findings**

(Note**:** LPF= Lending Policy to Farmers; CSRF= Credit Standards with Regard to Farmers; ARCF = Assessment of Return on Credit to Farmers; ACR= Assessment of Risk on Credit to Farmers)

Table 4.23 presents the regression analysis of the variables with Lending Policy to Farmers as the dependent variable with Credit Standards with Regard to Farmers; Assessment of Return on Credit to Farmers; and Assessment of Risk on Credit to Farmers as the independent variables. The constant term of the regression was 4.90 indicating that there was strong activity in lending to farmers independent of Credit Standards with Regard to Farmers; Assessment of Return on Credit to Farmers; and Assessment of Risk on Credit to Farmers. The constant term was statistically significant, $t_{(11)} = 3.16$, $p < 0.05$. The coefficient of Credit Standards with Regard to Farmers was -0.34 indicating that Credit Standards with Regard to Farmers

negatively affected lending to farmers. However, the coefficient was not statistically significant, $t_{(11)} = -1.15$, $p > 0.05$.

The coefficient of Assessment of Return on Credit to Farmers was -0.006 indicating that Assessment of Return on Credit to Farmers negatively affected lending policy to farmers. However the coefficient was not statistically significant, $t_{(11)} = -0.02$, $p > 0.05$. The coefficient of Assessment of Risk on Credit to Farmers was -0.29 indicating that Assessment of Risk on Credit to Farmers negatively affected lending to farmers. The coefficient was not statistically significant, $t_{(11)} = -0.64$, $p > 0.05$. the whole regression was not statistically significant and the variation in Lending Policy to Farmers was poorly explained by the variation in Credit Standards with Regard to Farmers; Assessment of Return on Credit to Farmers; and Assessment of Risk on Credit to Farmers, $F_{(3,7)} = 0.66$, $p_F > 0.05$, $R^2 = 0.22$.

**Table 4.4: Regression Results**

|  | Coefficient | Std. Error | t-ratio | p-value |
|---|---|---|---|---|
| **Constant** | 4.90 | 1.55 | 3.16 | 0.02 |
| **CSRF** | -0.34 | 0.30 | -1.15 | 0.29 |
| **ARCF** | -0.006 | 0.31 | -0.02 | 0.98 |
| **ACR** | -0.29 | 0.45 | -0.64 | 0.54 |
| **F$_{(3, 7)}$** | 0.66 |  |  |  |
| **P-value(F)** |  |  |  | 0.60 |
| **R-squared** | 0.22 |  |  |  |
| **Adjusted R-squared** | -0.11 |  |  |  |

**Source: Research Findings**

The regression model was found to take the form:

$$Lending\ Policy\ to\ Farmers = 4.90 - 0.34(CSRF) - 0.006(ARCF) - 0.29(ACR)$$

## 4.3    Interpretation of the Findings

This study has found three mains results. It has found that Credit Standards Credit Standards Regard to Farmers negatively affected lending to farmers. The research has also found that Assessment of Return on Credit to Farmers negatively affected lending policy to farmers. Further, Assessment of Risk on Credit to Farmers negatively affected lending to farmers. This indicates that Credit Standards with Regard to Farmers; Assessment of Return on Credit to Farmers; and Assessment of Risk on Credit to Farmers reduces the amounts provided to the farmers in Kenya.

The findings are similar to those of Poulton et al. (1998) who studied smallholder cash-crop production in cotton and cashew markets in Ghana, Pakistan, and Tanzania. It was found from the study that farmers' limited access to capital was a serious constraint on crop production. However, the willingness and ability of the private sector to supply farmers with loans was limited by the high risk of default on loan repayments and the high cost of information on potential borrowers. Such costs were too high to be recovered by the low returns on the normally small loans taken out by farmers.

The findings are also similar to those of Dell'Ariccia, Igan & Laeven (2012) who investigated the relationship between credit denial rates and lending prior to the financial crisis in the USA mortgage subsector. The study showed that lending standards were relatively lower before the crisis leading to high debt levels. The results were consistent with the notion that when lending standards are relaxed

leading to increased demand for loans. However, after the crisis lending policies became tighter leading to lower issuance of credit to all sectors. Just as indicated by this research, the research by Dell'Ariccia, Igan and Laeven (2012) showed that tighter credit standards negatively affected lending.

These findings also agree with those of Pafula (2003) investigated loan portfolio performance of the commercial banks and micro-financial intermediaries. This comparative study investigated the relationship between loan policies and administration and loan portfolio performance. Results of the study revealed a strong relationship between loan policies and loan administration. There was a negative relationship between loan appraisal and follow up action, strong negative relationship between loan appraisal and business sector outreach and positive relationship between follow up actions and business sector outreach. This indicated that there was a connection between lending and loan recovery policies.

# CHAPTER FIVE

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 5.1    Summary

This research was motivated by there not being a Kenyan study to investigate factors that determine the policy to lend to farmers in Kenya. This is due to the fact that Kenya is an agriculture based country and there is a lot of interest in the financing activities in this vital sector. The explanation provided by theory that there is connection between lending policy and issues like credit standards; assessment of return on credit; and assessment of risk on credit to farm may not be universal to all sector or countries.

This research was, therefore, designed to establish the determinants of lending to farmers by commercial banks in Kenya. The study was conducted through a survey using self administered structured questionnaires delivered to a sample of commercial banks in Kenya. The respondents were required to provide an assessment of their lending policy to farmers vis-a-vis their policies on   Credit Standards with Regard to Farmers; their Assessment of Return on Credit to Farmers; and their assessment of Risk on Credit to Farmers.

The results indicate that they give out loans to finance farming activities and that farmers have reliable sources of income that enable them to pay back their loans in time. However, their tighter policies concerning credit standards to farmers; their

assessment of return on credit to farmers; and their assessment of risk on credit to farmers tended to limit the lending to farmers.

## 5.2    Conclusion

From the findings of this research the following conclusions are drawn. Banks give out loans to farmers and farmers have sources of income that enable them to pay for the loan and the accruing interests.

The banks rely on the financial statements of applicants, but did not strictly push for collateral for the loans given to farmers. The profitability of banks together depended on their view farmers as profitable customers with high returns, however, the location of the banks within easy reach to facilitate borrowing by farmers were not a serious factor driving profitability. The loan recollection policy of the banks was determined by their consideration that credit to farmers is riskier than credit to other borrowers.

It is also concluded that standards adopted before lending to farmers has a great effect on the amount of credit demanded and supplied.  High credit standards regard to farmers reduce lending to farmers. Strict rules in the assessment of return on credit to farmers negatively also reduce the amount of credit given to farmers. Further, higher standards of assessment of risk on credit to farmers reduce lending to farmers. This indicates that credit standards with regard to farmers; assessment of return on credit to farmers; and assessment of risk on credit to farmers reduces the amounts provided to the farmers in Kenya.

## 5.3    Recommendations for Policy

Based on the findings and the conclusions of this study, the following recommendations are made. Policies should be designed to ensure that the income from farmers in Kenya is stabilized. This is because Banks give out loans to farmers based on the stability of the sources of income for the farmers that enable them to pay for the loans and the accruing interests.

Policies should be put in place to ensure that farmers have skills to manage their finances properly to maintain high creditworthiness. This is because banks rely on the financial statements of applicants and not necessarily on collateral for the loans given to farmers. The bank put in mind their profitability which depends on their view and belief that farmers as profitable customers with high returns. The view that farmers are risky loan taker determined the strictness of loan recollection policy as a risk mitigation strategy. Empowering farmers to manage their funds would reduce such risk.

Policies should be put in place to help banks relax their credit qualification for farmers. Just like any other financial institution, banks want to ensure that their funds are safe as they lend to farmers. However, much as the farmers require funding, the risk control measures and their desire for profitability is stifling the lending. This recommendation is based on the finding that tighter controls concerning credit standards to farmers, assessment of return on credit to farmers, and assessment of risk on credit to farmers tended to limit lending.

Commercial banks should adopt special arrangements for lending to farmers other than lumping them together with other borrowers. Because many farmers are not accessing credit, the credit terms given to farmers such as loan period, credit limits and interest rates need to be designed and determined according to the specific nature of the farming business, so as to enable them repay the loans as per schedule.

Commercial banks should supply vital information such as monitoring fees, insurance fees, and penalty for early loan repayment to farmers since such costs affect their profitability. Credit beneficiaries also need to be well informed on their obligations, particularly in loan repayment needs.

## 5.4    Limitations of the Study

This study has the following limitations: first, the study assumed that the relationship between lending policy to farmers one hand and credit standards with regard to farmers, assessment of return on credit to farmers and assessment of risk on credit to farmers on the other hand is linear. This assumption led to the use of the multiple factor linear regression model. There is a possibility that the relationship is not linear like used in the analysis and that is why the variables were weakly connected. This study is unable to categorically state whether the relationship between lending policy to farmers one hand and credit standards with regard to farmers, assessment of return on credit to farmers and assessment of risk on credit to farmers on the other hand is linear or otherwise. The findings are therefore limited to the linearity assumption.

A second limitation of this study is that the findings are applicable to Kenyan banks and within the period of study. It is not established whether the results are applicable

outside Kenya or not. Further, lending is a long term issue; the study has only given findings applicable at the time of study. As to whether the findings are applicable after the study was conducted the study has not expressly given that indication.

The findings are as accurate as the data used and the analysis model used. The limitations concerning the accuracy of the responses also contribute to the limitation of this study. The responses are as accurate as the respondents' articulation of the issues in the questionnaires. Further, the model of analysis does not show whether there is a causality relationship between the dependent and the independent variables.

## 5.5    Suggestions for Further Research

The findings of this study can be improved based if the following are done. This study has not established the causality relationship between lending policy to farmers one hand and credit standards with regard to farmers, assessment of return on credit to farmers and assessment of risk on credit to farmers on the other hand in Kenya. A study should be done to establish whether there is a causality relationship and, further, establish the nature of the causality.

A study can also be done in more than one country to make better the findings and provide more room for generalizablity. This is because the findings of this study are focused on the Kenyan banks alone. A study with a wider population will be more informing and will give more generalizable results.

A study can be done to include historical data. This can be done so as to mitigate the possible biases arising from the fact that primary data collected by use of questionnaires are usually not present in historical data.

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# APPENDICES

## Appendix I: List of Commercial Banks in Kenya

1. African Banking Corporation Ltd.
2. Bank of Africa Kenya Ltd.
3. Bank of Baroda (K) Ltd.
4. Bank of India
5. Barclays Bank of Kenya Ltd.
6. CFC Stanbic Bank Ltd.
7. Charterhouse Bank Ltd
8. Chase Bank (K) Ltd.
9. Citibank N.A Kenya
10. Commercial Bank of Africa Ltd.
11. Consolidated Bank of Kenya Ltd
12. Co-operative Bank of Kenya Ltd.
13. Credit Bank Ltd.
14. Development Bank of Kenya Ltd.
15. Diamond Trust Bank Kenya Ltd.
16. Dubai Bank Kenya Ltd.
17. Ecobank Kenya Ltd
18. Equatorial Commercial Bank Ltd.
19. Equity Bank Ltd.
20. Family Bank Limited
21. Fidelity Commercial Bank Ltd
22. Fina Bank Ltd
23. First community Bank Limited
24. Giro Commercial Bank Ltd.
25. Guardian Bank Ltd
26. Gulf African Bank Limited
27. Habib Bank A.G Zurich
28. Habib Bank Ltd.
29. Imperial Bank Ltd
30. I & M Bank Ltd
31. Jamii Bora Bank Limited.
32. Kenya Commercial Bank Ltd
33. K-Rep Bank Ltd
34. Middle East Bank (K) Ltd
35. National Bank of Kenya Ltd
36. NIC Bank Ltd
37. Oriental Commercial Bank Ltd
38. Paramount Universal Bank Ltd
39. Prime Bank Ltd
40. Standard Chartered Bank Kenya Ltd
41. Trans-National Bank Ltd
42. UBA Kenya Bank Limited
43. Victoria Commercial Bank Ltd

**Appendix II:**

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August, 2012
The Manager,
…………………………………………………….
Dear Sir/Madam,

## RE: INTRODUCTION-ROBERT LANGAT


I am a student of the University of Nairobi, pursuing a Masters of Business Administration degree. In partial fulfilment of the requirements for this degree, I am required to carry out a research project on a real topic in my area of study. I am conducting a survey to find out the determinants of lending to farmers by commercial banks in Kenya.

I kindly request you to provide the required information to the best of your knowledge by filling out the attached interview guide. The information is strictly for academic purposes only and will be treated in the strictest confidence. A copy of the research project will be made available to you on request. Your kind assistance will be highly appreciated.


Yours faithfully,

Robert Langat                                     Mr. Mirie Mwangi
Sign_____                               Sign_____
Date_____                               Date_____
**(RESEARCHER)**                                       **(SUPERVISOR)**

**Appendix III: Questionnaire**

You are requested to complete this questionnaire as honestly as possible. The data obtained from this questionnaire will be used solely for academic purpose and will be handled with utmost confidentiality.

**SECTION A: GENERAL INFORMATION**

**Complete this section by filling in the spaces**

1. How many people has your bank employed? Tick (✓) Appropriately

| | |
|---|---|
| Less than 10 | |
| Between 11 and 50 | |
| Between 51 and 250 | |
| More than 250 | |

2. For how many years has your bank been operating? Tick (✓) Appropriately

| | |
|---|---|
| Less than 10 years | |
| Between 11 and 30 years | |
| Between 31 and 50 years | |
| More than 50 years | |

3. How many branches do yu have in Kenya?_____

4. Tick (✓) the location your bank operates in

| | |
|---|---|
| Only in Kenya | |
| In Kenya and East Africa | |
| In Kenya and beyond East Africa | |

## SECTION B

(a) To what extent do you agree that the following contribute to your lending policy to

farmers

**(1- Strongly disagree 2- Disagree,   3- Neutral 4 – Agree  5 – Strongly agree)**

| I | Lending Policy to Farmers | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1. | The bank gives out loans to finance farming activities | | | | | |
| 2. | The interest rate charged on loans restrict farmers from borrowing | | | | | |
| 3. | The interest rate charged by the bank is always favourable to farmers | | | | | |
| 4. | Farmers are able to take loans at any interest rate | | | | | |
| 5. | The bank always offers farmers better interest rate | | | | | |
| 6. | The interest rate discourages farmers from applying for loans | | | | | |
| 7. | The loan repayment period that the bank gives enables farmers to accumulate assets | | | | | |
| 8. | The loan repayment period enables borrowers to pay all their pending loans in time | | | | | |
| 9. | The loan repayment period given by the bank is always favourable to farming activities | | | | | |
| 10. | Farmers have reliable source of income that enables them to pay back their loans in time | | | | | |

Other (Please specify)

_____

**SECTION C**

(b) To what extend does your bank rely on the factors below when issuing credit to farmers? Tick the number that best describes your opinion.

**(1- Not at all   2- To a Small Extent 3- Not Sure 4 - To a High Extent   5-Always)**

| II | Credit Standards with Regard to Farmers | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1. | The financial statements of applicants | | | | | |
| 2. | Character/ Integrity of the farmer | | | | | |
| 3. | Capacity of the farmer to pay | | | | | |
| 4. | The bank accepts the type of collateral that farmers provide for bank loans | | | | | |
| 5. | Capital/contribution | | | | | |
| 6. | Cash flow statements of the farmer | | | | | |
| 7. | Trade and bank reference about the loan applicant | | | | | |
| 8. | Only selected farmers can always access loans from this bank | | | | | |
| 9. | The interest rates charged by this bank prevents farmers from acquiring loans | | | | | |
| 10 | Farmers pay back their pending loans in time with all the interest | | | | | |

Other factors (Specify)

_____

**SECTION D**

(c) To what extend does your bank depend on profitability when extending credit to

farmers? Tick the number that best describes your opinion.

**(1- Never 2- Sometimes 3- Frequently 4 – Very Frequently 5 – Always)**

| | **III   Assessment of Return on Credit to Farmers** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|---|
| 1. | Does your bank view farmers as profitable customers with high returns | | | | | |
| 2. | Does your bank consider its profitability when issuing credit to farmers | | | | | |
| 3. | Our bank's branches are located within easy reach to facilitate borrowing by farmers | | | | | |
| 4. | The bank offers tailor made products to farmers despite the profitability every year | | | | | |
| 5. | Your banks expansion strategy targets rural areas so as to improve accessibility of credit by farmers | | | | | |
| 6. | Does your bank only extend profit to farmers only when you make huge profits | | | | | |
| 7. | This bank usually lends to farmers the exact amount of the loan that they require for farming business regardless of the bank's profitability | | | | | |
| 8. | The interest rates charged by this bank to farmers depend on the banks profitability | | | | | |
| 9. | The bank's profitability limits the number of farmers who can access agricultural loans to many farmers | | | | | |
| 10. | Our bank's branches are located within easy reach to facilitate borrowing by farmers | | | | | |

Other Specify)

_____

**SECTION E**

(a) To what extent do you agree that the following affect the loan recollection policy of
your bank? Tick the option that best explains your position.

**(1- Strongly disagree 2- Disagree 3- Neutral 4 – Agree   5 – Strongly agree)**

| IV  Assessment of Risk on Credit to Farmers | | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1. | Does your bank consider credit to farmers to be riskier than credit to other borrowers | | | | | |
| 2. | Is your bank efficient in collecting its due debts from farmers? | | | | | |
| 3. | Your bank keenly observes the collection period given to each farmer. | | | | | |
| 4. | Your bank has written steps in the handling of defaulting farmers. | | | | | |
| 5. | Your bank definitely takes defaulting farmers to court. | | | | | |
| 6. | Your bank has a very efficient system for keeping farmers bank statements. | | | | | |
| 7. | Farmers outstanding credit to total deposits are regularly analyzed. | | | | | |
| 8. | Our bank charges high interest rates because of the high risk of lending to farmers | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 9. | Our bank has unfavourable lending policies that determine extension of credit to farmers | | | | | |
| 10. | Due to the high risk involved in lending to farmers our bank offers small credit to farmers | | | | | |

Other (Specify)

_____

**THANK YOU**

## Appendix IV: Data used in Regression

(Averages of the responses from the 11 banks on the variables)

| Bank | LPF | CSRF | ARCF | ACR |
|------|-----|------|------|-----|
| 1. | 3.5 | 3.00 | 3.40 | 3.40 |
| 2. | 3.5 | 3.00 | 3.80 | 3.10 |
| 3. | 1.8 | 3.90 | 4.10 | 4.70 |
| 4. | 3.8 | 2.90 | 2.70 | 3.00 |
| 5. | 2.6 | 4.00 | 2.10 | 2.80 |
| 6. | 2.1 | 4.40 | 3.30 | 2.80 |
| 7. | 2.7 | 2.10 | 2.10 | 2.80 |
| 8. | 3.7 | 2.70 | 3.10 | 3.90 |
| 9. | 2.8 | 2.70 | 1.60 | 3.00 |
| 10. | 2.3 | 2.00 | 4.40 | 3.80 |
| 11. | 2.6 | 3.40 | 2.40 | 3.80 |

**Source: Research Findings**