

**A SURVEY OF CREDIT RISK MANAGEMENT PRACTICES BY SACCOs IN  
NAIROBI**

**BY**

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## DECLARATION

This research project is my original work and has not been submitted for a degree in any other university.

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May almighty God bless you.

## **DEDICATION**

To the almighty God for the gift of life and intellectual capacity to handle this project. To my family members without whose support, understanding and patience when I could not be with them because of my studies. May God bless you abundantly.

## **ABSTRACT**

SACCOs operate in an environment of considerable risks and uncertainty. Credit risk is one of the major risks faced by financial institutions today. The objective of the study was to identify credit risk management practices adopted by SACCOs in Nairobi. The target population of the study consisted of the 200 active SACCOs in Nairobi from which 35 SACCOs were identified using a systematic sampling technique. Out of this 35 only 31 responded to the questionnaires issued to them.

The findings revealed that majority of the SACCOs use credit risk management practices to mitigate risks as a basis for objective credit risk appraisal. Majority (28) out of the (31) respondents agreed that credit risk management practices have impacted positively to their organizations by ensuring efficiency in carrying out its obligations and in meeting its objectives.

The findings also show that the most popular methods of promoting credit risk awareness amongst staff in SACCOs are through regular meetings and supervisions on one on one basis. Of the 31 SACCOs interviewed, 22 stated 3-months (90 days) credit default policy. In addition, 28 of the 31 SACCOs interviewed stated that they review their credit policy annually while the remainder review their credit policy half-yearly. SACCOs interviewed indicated that they used qualitative methods while the credit scoring system was applied by very few. Majority of the SACCOs relied heavily on the discretion and ability of portfolio managers for effective credit risk management practices as opposed to a system of that standardizes credit and credit risk decisions.

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## **CHAPTER ONE**

## INTRODUCTION

### 1.1 Background to the study

Financial institutions (FIs) are very important in any economy. Their role is similar to that of blood arteries in the human body because they pump financial resources for economic growth from the depositories to where they are required ([Shanmugam and Bourke, 1992](#)). They are key providers of financial information to the economy. They play a critical role in emergent economies where borrowers have no access to capital markets. This is evidence where well-functioning financial institutions accelerate economic growth while poorly functioning financial institutions impede economic progress and exacerbate poverty (Barth, Caprio and Levine, 2004).

Credit risk is the change in net asset value due to changes, the perceived ability counter parties to meet their contractual obligations. It is the most obvious risk of a credit union by the nature of its activity and in terms of potential losses; it is typically the largest type of risk. It occurs when a borrower defaults and does not honor his or her obligation to service debt on time. Reasons for default may include cases where the obligor is in a financially stressed situation, may be facing a bankruptcy procedure or willingly refusing to pay. The default of a small number of members may result in a very large loss for the union (Bessis 2003).

Credit risk is the oldest and important risk which credit unions are exposed to. Importance of credit risk management is increasing with time because of some reasons like economic crises and stagnation, company bankruptcies, infraction of rules in company accounting and audits, growth of off-balance sheet derivatives, declining and volatile values of collateral, borrowing more easily for the small firms, financial globalization and business risk-based capital requirements (Boston Consulting Group 2001).

According to Greuning and Bratanovic (2003) the basis of a sound credit risk management system include guidelines that clearly outline the scope and allocation of bank credit facilities and the manner in which the credit portfolio is managed that is how loans are originated, appraised, supervised and collected.

According to Basel, 2010 it is essential for financial institutions to have an effective credit risk management system in place which involve establishing an appropriate credit risk environment, operating under a sound credit granting process, maintaining an appropriate credit administration that involves monitoring process as well as adequate controls over credit risk. It requires top management to ensure that there are proper and clear guidelines in managing credit risk. All guidelines should be stipulated throughout the organization and everybody involved in credit risk management should understand them.

Financial institutions should adopt credit risk management practices to maximize shareholder value by enhancing the value of the firm. Value enhancement can arise from minimization of costs of financial distress, minimization of taxes and minimization of the possibility that the firm may be forced to forego positive net present value projects because it lacks the internally generated funds to do so.

However, the managerial risk aversion hypothesis holds that managers will seek to maximize their own personal well being by engaging in credit risk management practices without considering the effects it will have on the shareholders. Specifically this arises when the interests of shareholders are not perfectly aligned with those of the managers or when they pursue risk management strategies designed to insulate their own personal wealth from the effects of changes in interest rates, commodity prices, or foreign currency values.

SACCOs are diversified which provide a good diversification of the risk across various Union members of different types, industry sectors and geographies like Kenya Bus Services SACCO, Kenya Planters Cooperative Society, Kenya Creameries Cooperative, etc. Diversification strategies spread the credit risk in order to avoid concentration of credit risk problems, (Bessis 2003). The second practice is credit enhancement where a SACCO enhances its credit by buying credit protection in the form of guarantees from financial guarantors or through credit derivative products. Credit scoring mechanism is the other credit risk management technique where the SACCO analyzes the borrower's risk. A good credit scoring model has to be highly discriminative, high scores reflect almost no risk and low scores correspond to very high risk or the opposite depending on the sign condition (Bessis, 2003).

Credit-approval is also a classical credit union technique where lending limit is a multiple of savings. This technique helps to build savings-led institution and allows institution to learn about the discipline and economic capacity of a client by observing frequency of deposits. Credit unions must have in place written guidelines on credit approval process, approval authorities of individuals or committees as well as decision basis (Mwisho, 2001).

In Uganda, Mutara development SACCO has a formalized and recently reviewed; 2006-2010 credit policy manual that clearly spells out the loan application, appraisal and approval procedures as well as requirements for the various loan products offered by the institution. All concerned staff should display adequate awareness of the policies and endeavour to apply them. This has enabled better portfolio monitoring and delinquency tracking through the use of appropriate reporting tools (Planet Rating East Africa, SACCO growth Report, 2007).

In Mauritius, credit unions have adopted credit documentation as a way of managing credit risk. This concept involves documentation of essential part of the credit process and this is required for each phase of the credit cycle including credit application, credit analysis, credit approval, credit monitoring and collateral valuation and impairment recognition, foreclosure of impaired loan and realization of security (Saunders and Cornett 2002).

SACCOs need to find ways to increase member funding since this provides the lowest cost, lowest risk form of capital for operations & investment. According to RUSACCOS lending rules and procedures if a member fails to pay his loan on time the funds will be replenished from the accounts of the guarantors. Hence, it is not a usual practice to record such type of maladjustment or failures created in repaying their loans. Additionally lack of entrepreneurial skills or know how skills and business development services to utilize their loans to generate more income.

Hence, members require demand driven & tailor made trainings to utilize their loans properly and efficiently in addition to other conditions (Kidanu 2008).

### **1.1.1 Saving and Credit Co operative Societies (SACCOs)**

A SACCO is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly-owned and democratically controlled enterprise. The members have equal rights to take part democratically in the management and administration of the company of which they share the duties and the advantages proportionally with the transactions of each member regardless of their deposit amount or the number of shares they own (Tummala and Burchett, 1999, pp.223-25).

The fundamental objective of a SACCO is to promote by mutual aid the economic and social welfare of its members by granting loans to cover their economic needs, supporting the spirit of initiative in agricultural or industrial work and careful use of the saving produced locally (WOCCU, August 2005 Online).

The first cooperative society in Kenya was organized by Europeans settlers in Rift Valley in 1908. The society was supposed to market cereal crops, fruits and diary products. That time there was no Co-operative Law to govern it until 1931. In 1966, the cooperative societies Act was enacted which introduced control measures to counteract mismanagement and misappropriation of funds. The savings and credit cooperative societies were formed in late 1970's. SACCOs have grown significantly and they play a major role in providing financial services to majority of Kenyans particularly in the rural areas for example between 1985 and 2006 the number of registered SACCOs rose from 1285 to 4876. (Ministry of Co-operative Development and Marketing 2007)

The Kenya union of savings and credit co-operatives (KUSCCO) ltd was registered on 27th September, 1973 and officially kicked off its operations in 1974 as the umbrella organization of all SACCOs in Kenya. KUSCCO the umbrella organization of all SACCOs in Kenya was admitted to WOCCU in February 2009. Since then, there has been a fast growth enhanced by fast diversification in various product developments to meet the dynamic members' financial needs. This is evident from the financial performance which has significantly improved with an asset base of over Kshs. 200 billion and a total savings exceeding Kshs. 170 billion (this is a huge portfolio that makes up nearly 20 per cent of the total domestic savings in the country a factor

that underlines the importance of the Movement in Kenya's financial fabric), the increased dividend rate payment of 9% as well as share capital growth from KShs.253 million in 2007 to KShs.301 million in 2008 (WOCCU, March 2010, Online).

The basic structure of SACCOs is what differentiates them from banks in that they are user-owned financial intermediaries. Members typically have a common bond based on geographic area, employer, community, industry or other affiliation such as Mwalimu SACCO, Kenya bankers SACCO, Kenya Bus Services SACCO, among others. SACCOs have reached both public and private sectors of society and hence developed a much broader and deeper market penetration and they are better positioned to continue serving the 'unbanked' population (WOCCU, January 2009, Online). The Kenya SACCO system registered under cooperative Societies Act, chapter 490, is the largest credit union network in the whole of Africa. There are about 5,000.00 SACCOs currently registered in Kenya (Ministry of Co-operative Development and Marketing 2008)

## **1.2 Statement of the Problem**

SACCOs play an important role of serving the financial requirements of households, small and medium enterprises. They encourage individual to save thereby accumulating capital for economic development of the country. Lending has been and still is the mainstay of financial institutions and this is more true to emerging economies of developing countries where capital markets are not yet well developed. To most of the transition economies, lending activities has been a controversial and difficult matter because business firms on one hand are complaining about lack of credit and the excessively high standards set by financial institutions while financial institutions on the other hand have suffered large losses on bad loans (Richard, 2006).

Credit risk management practices will help credit unions reduce their exposure to credit risks and enhance their ability to compete with other well established financial institutions like banks in the market (Iqbal and Mirakhor). Reduction of SACCO exposure to credit risk will enhance achievement of its set objectives and ascertain its success. Therefore, it is necessary for SACCOs to have in place comprehensive credit risk management practices and reporting process to identify, measure, monitor, manage, report and control credit risks. Efficient credit risk

management practices have been vital in allowing the phenomenal growth in financial institutions, enhance viability and sustained growth.

However, the mere perception of high credit risk can dissuade credit unions from entering a particular market segment whereas the major contributing factor to that perception may be due to lack of adequate credit risk evaluation and management practices. In addition, if the practices are identified and the risk controllable, management can take certain steps to improve its potential for success. Failure to control credit risk may lead to firms' insolvency, significant drain on capital and net worth that they adversely affect firms' growth prospect and ability to compete with others (Saunders and Cornett, 2002).

Credit risk management practices is an issue of concern today and there is need to develop improved processes and systems to deliver better visibility into future performance of the credit unions. According to Saunders and Cornett (2002), when a good selection strategy for risk monitoring is adopted this implies good pricing of the products in line with the estimated risk which greatly affect their profitability. Wambugu (2008) who studied credit risk practices by micro finance institutions (MFIs) in Kenya found that most MFIs had clearly defined credit policies which were reviewed annually and goals which were formulated by credit committees and credit control department while Ngare 2008 did a survey of credit risk management practices by commercial banks in Kenya.

While the above research outcomes provide insight on credit risk management techniques by commercial banks and MFIs, there is no known study to the researcher, which has been done on the survey of practices of credit risk management in SACCOs. Therefore the knowledge gap exists as to whether SAACOs use any Credit risk management practices. This study seeks to identify the credit risk management practices used by SACCOs in Nairobi.

### **1.3 Objective of the Study**

To identify credit risk management practices adopted by SACCOs in Nairobi

#### **1.4 Importance of the Study**

It is anticipated that the findings of this study will be important to;

The Credit Unions management and directors as it will provide an insight into the various approaches towards credit risk management techniques, how to effectively handle the issues of credit risk management and how to reduce exposure to the risk.

The government in the developing policy papers, policy making regarding taxation and other regulatory requirements of SACCOs in the country. The policy maker will know how well to incorporate the sector effectively to ensure it's full participation.

The academicians who will be furnished with relevant information regarding credit risk management practices in SACCOs. The study will contribute to the general body of knowledge and form a basis for further research.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter constitutes both theoretical and empirical literature. Theoretical literature discusses what various authors have theorised by way of beliefs in regard to credit risk management practices. Empirical literature will highlight on the various research findings by scholars world wide. The researcher's opinions on the findings will also be highlighted.

#### **Measuring credit risk**

Lending financial institutions have employed different models and techniques to assess the default risk on trade credit. These vary from the relatively qualitative to the highly qualitative. According to Wambugu 2008 most Micro finance institution's use 6C model as a credit appraisal technique to evaluate potential borrower as follows; capacity which is an assessment of the customers ability to repay the debt. It is determined by retrieving resources of income and vetting of the commitments. Character relates to an assessment of the personal character, honesty and integrity of the customer and his willingness to comply with credit terms and conditions (Mc Menamin, 1999).

Collateral this is the security given to secure the loan in terms of non-encumbered assets. It involves evaluation of the assets which the customer has availed as security for the debt whereas conditions refer to the overall environment that is commercial, socio economic technological and political environment which should be conducive for a successful project implementation. The decision to grant credit to customers is influenced by current economic and business conditions or specific business conditions relating to the firm. Controls involve assessing the operating effectiveness of the information systems used by the borrower to manage the business and finally capital means how substantial the customers' capital resources are and if they exist and what are they.

Qualitative models are used when information about borrowers is not publicly available, thus the financial institution manager assembles information from private sources such as credit file and or purchase from external sources such as credit rating agencies. This will help in making informed judgment on the probability of default and the price (Saunders and Cornett, 2002).

Credit scoring models use data on observed borrower characteristics to calculate either the probability of default or to sort borrowers in different default risk classes. To employ credit scoring the manager must identify key economic and financial variables, each is given a relative weighing or ranking such as income, bank reference and credit references. After the data is identified, statistical techniques score the default risk probability. Newer models use finance theory and more widely available financial market data to make inferences about default probability on debt and loan instruments. These models are used to evaluate large borrowers in the corporate sector such as risk adjusted return on capital (Saunders and Cornett, 2002).

## **2.1 Theoretical framework**

### **2.1.1 Pricing Theory**

This theory subscribes to the fact that an estimate of the benefits of diversification would require that practitioners calculate the covariance of returns between every pair of assets. In their Capital Asset Pricing Model (CAPM), Sharpe (1964) and Lintner (1965) solved this practical difficulty by demonstrating that one could achieve the same result merely by calculating the covariance of every asset with respect to a general market index. With the necessary calculating power reduced to computing these far fewer terms (betas), optimal portfolio selection became computationally feasible.

A more interesting alternative was the Arbitrage Pricing Theory (APT) of Ross (1976). His approach moved away from the risk vs. return logic of the CAPM, and exploited the notion of pricing by arbitrage to its fullest possible extent. As Ross noted, arbitrage-theoretic reasoning is not unique to his particular theory but is in fact the underlying logic and methodology of virtually all of finance theory. In sum, the scholars suggest that maximum benefits are realised when the risks are fully diversified.

### **2.1.2 Theory of Finance**

The theory of finance is concerned with how individuals and firms allocate resources through time. In particular, it seeks to explain how solutions to the problems faced in allocating resources through time are facilitated by the existence of capital markets (which provide a means for individual economic agents to exchange resources to be available at different points in time) and of firms (which, by their production-investment decisions, provide a means for individuals to transform current resources physically into resources to be available in the future).

Numerous economists have explained the role of finance in the market with the help of different finance theories. The concept of finance theory involves studying the various ways by which businesses and individuals raise money, as well as how money is allocated to projects while considering the risk factors associated with them. The theory argues that resources should be allocated to the lowest risk areas.

### **2.1.3 Portfolio Theory to Credit Risk Management**

Since the 1980s, banks have successfully applied modern portfolio theory (MPT) to market risk. Many banks are now using value at risk (VAR) models to manage their interest rate and market risk exposures. Unfortunately however, even though credit risk remains the largest risk facing most banks, the practical of MPT to credit risk has lagged (Margrabe, 2007).

Banks recognize how credit concentrations can adversely impact financial performance. As a result, a number of sophisticated institutions are actively pursuing quantitative approaches to credit risk measurement, while data problems remain an obstacle. This industry is also making significant progress toward developing tools that measure credit risk in a portfolio context. They are also using credit derivatives to transfer risk efficiently while preserving customer relationships. The combination of these two developments has precipitated vastly accelerated progress in managing credit risk in a portfolio context over the past several years.

Traditionally, banks took an asset-by-asset approach to credit risk management. While each bank's method varies, in general this approach involves periodically evaluating the credit quality of loans and other credit exposures, applying a credit risk rating, and aggregating the results of

this analysis to identify a portfolio's expected losses. The foundation of the asset-by-asset approach is a sound loan review and internal credit risk rating system. A loan review and credit risk rating system enable management to identify changes in individual credits, or portfolio trends in a timely manner.

Based on the results of its problem loan identification, loan review, and credit risk rating system management can make necessary modifications to portfolio strategies or increase the supervision of credits in a timely manner.

While the asset-by-asset approach is a critical component to managing credit risk, it does not provide a complete view of portfolio credit risk, where the term risk refers to the possibility that actual losses exceed expected losses. Therefore to gain greater insight into credit risk, banks increasingly look to complement the asset-by-asset approach with a quantitative portfolio review using a credit model.

Banks increasingly attempt to address the inability of the asset-by-asset approach to measure unexpected losses sufficiently by pursuing a portfolio approach. One weakness with the asset-by-asset approach is that it has difficulty identifying and measuring concentration. Concentration risk refers to additional portfolio risk resulting from increased exposure to a borrower, or to a group of correlated borrowers.

## **2.2 Credit Risk Management Practices**

In Uganda, Mutara Development SACCO has a formalized and recently reviewed; 2006-2010 credit policy manual that clearly spells out the loan application, appraisal and approval procedures as well as requirements for the various loan products offered by the institution. All concerned staff should display adequate awareness of the above policies and endeavour to apply them. The institution has further benefited from an improved portfolio management methodology through its partnership with the Microfinance Support Centre Limited to which it reports bi-monthly. This has enabled better portfolio monitoring and delinquency tracking through the use of appropriate reporting tools (Planet Rating East Africa, SACCO growth Report, 2007).

Delinquency management has improved as the SACCOs have recently adopted a strategy to utilize the services of court brokers to supplement the recovery efforts of the loan committee. The loan officer's have adequate appraisal and monitoring skills, experience as well as a good knowledge of credit risk management. The institution also has in place a systematic application of guarantors and collateral to cover loans particularly production loans. The use of collateral particularly fixed assets, in the recovery of defaulted loans has been successful to a larger extent although a few cases have proven difficult in the past.

A greater portion of Mutara's funding is derived from outstanding client deposits (predominantly volatile short term demand deposits). This poses a potential maturity risk as the average portfolio term is eight months. Nevertheless, the institution continues to access long-term loans (24 months) from Mutara Saving and credit Limited (MSCL), thus considerably reducing maturity risks (Planet Rating East Africa, SACCO growth Report, 2007).

### **2.2.1 Credit-approval**

This is a classical credit union technique where lending limit is a multiple of savings. This technique helps to build savings-led institution and allows institution to learn about the discipline and economic capacity of a client by observing frequency of deposits. Loans may not have a direct relationship with repayment capacity. If the deposit rate is low, inflation rate is high and currency devaluations expectations high, savings will be dampened.

Clear established process of approving new credits and extending the existing credits has been observed to be very important while managing credit risks in SACCOs. Credit unions must have in place written guidelines on credit approval process, approval authorities of individuals or committees as well as decision basis. The board of directors should always monitor loans. Approval authorities will cover new credit approvals, renewals of existing credits and changes in terms and conditions of previously approved credits particularly credit restructuring which should be fully documented and recorded. Prudent credit practice requires that persons empowered with the credit approval authority should not have customer relationship responsibility. Approval authorities of individuals should be commensurate to their positions within management ranks as well as their expertise (Mwisho, 2001).

Depending on the nature and size of credit, it would be prudent to require approval of two officers on a credit application in accordance with the Board's policy. The approval process should be based on a system of checks and balances. Some approval authorities will be reserved for the credit committee depending on the size and complexity of the credit transaction. Depending on the size of the financial institution, it should develop a corps of credit risk specialists who have high level of expertise and experience and who have demonstrated judgment in assessing, approving and managing credit risk. An accountability regime should be established for decision-making process accompanied by a clear audit trail of decisions taken and proper identification of individuals/committees involved. All this must be properly documented (Caoutte, Altman and Narayanan, 1998).

All credit approvals should be at an arm's length, based on established criteria. Credits to related parties should be closely analyzed and monitored so that no senior individual in the institution is able to override the established credit granting process. Related party transactions should be reviewed by the board of directors under due processes of good governance (Derban, Binner and Mullineux, 2005).

In Mauritius, credit unions have strictly adopted credit documentation as a way of managing credit risk. This concept involves documentation of essential part of the credit process and this is required for each phase of the credit cycle including credit application, credit analysis, credit approval, credit monitoring and collateral valuation and impairment recognition, foreclosure of impaired loan and realization of security. The format of credit files must be standardized and files neatly maintained with an appropriate system of cross-indexing to facilitate review and follow-up. The SACCOs of Mauritius pay particular attention to the quality of files and the systems in place for their maintenance. Documentation establishes the relationship between the union and the member who are seeking loan and forms the basis for any legal action in a court of law. Credit applications must be documented regardless of their approval or rejection. All documentation should be available for examination by the SACCOs of Mauritius (Saunders and Allen 2002).

### **2.2.2 Credit control policy**

Mwisho, (2001) indicated that credit unions should have a written loan policy that is approved by the board of directors of the financial institutions. The board should review the policy on an annual basis and revise where necessary. The loan policy should include the policy objective, eligibility requirements for receiving a loan, permissible loan purposes, acceptable types of collateral, loan portfolio diversification requirements, loan types, interest rates, terms, frequency of payments, maximum loan sizes per product type, maximum loan amounts as a percentage of collateral values, member loan concentrations, restrictions on loans to employees and officials, loan approval requirements, monetary loan limits, loan documentation requirements and co-signer requirements. Besides the loan policy, credit unions should also develop lending procedures which are developed by the operational management team who are responsible to up-to-date and ensure they are indicative of current lending practices.

Loan concentration limits is one of the critical element of the loan policy. The credit unions should not issue a loan to a member or related parties if such a loan would cause that member or group of related parties to exceed the less of 10% of total assets or 25% of the credit union's institutional capital. For purposes of this regulation, related parties are those dependent on the same source of income such as a family business. Officials or their families must not directly or indirectly receive any commission, fee or other compensation in connection with any loan issued to a member.

The second critical component in the loan policy is the restriction placed on loans to employees, officials and their immediate families.

### **2.2.3 Credit Scoring Mechanism**

Credit scoring is a credit risk management technique that analyzes the borrower's risk. In its early meaning, credit scores were assigned to each customer to indicate its risk level. A good credit scoring model has to be highly discriminative, high scores reflect almost no risk and low scores correspond to very high risk or the opposite depending on the sign condition. The more discriminative the scoring system is, the better are the customers ranked from high to low risk. In the calibration phase, risk measures are assigned to each credit pools. The quality of the credit

scores risk ranking and calibration can be verified by analyzing ex-post observed credit losses per score (Bessis, 2003). Credit scores are often segmented into homogeneous pools. In the past, credit scoring focused on measuring the risk that a customer would not fulfil his/her financial obligations and run into payment arrears. Recently credit scoring evolved to loss and exposure risk as well. Scoring techniques are nowadays used throughout the whole life cycle of credit as a decision support tool or automated decision algorithm for large customer bases. With increasing competition, electronic sale channels and recent saving, credit and cooperative regulations have been important catalysts for the application of semi- automated scoring systems. Since their inception, credit scoring techniques have been implemented in a variety of different, yet related settings such as credit approval.

Originally, the credit approval decision was made using a purely judgmental approach by merely inspecting the application form details of the applicant and commonly focused on the values of the 5 Cs which are character, capital, collateral, capacity and conditions of a customer (Pykhtin, 2005). Character which measures the borrower's personal character and integrity including virtues like reputation and honesty and their willingness to comply with the credit terms and conditions; Capital which measures the difference between the borrower's assets which may include car, house and liabilities for example renting expenses and whether they exist; Collateral evaluation of the assets provided in case payment problems occur for example house hold assets, house, car; Capacity which measures the borrower's ability to pay based on for example job status, source of income and finally; Conditions where the members' borrowing circumstances are evaluated for example market conditions, competitive pressure, and seasonal character (Pykhtin, 2005). This study is consistent with Njiru (2003), Simiyu (2008), Kimeu (2008), Wambugu (2008) and Mwirigi (2006) who found out that financial institution and credit societies use 5C's techniques as a basic tool in credit risk appraisal.

#### **2.2.4 Credit enhancement**

When a SACCO observes that it's too exposed to a certain category of credit risk, it can buy credit protection in the form of guarantees from financial guarantors or through credit derivative products. By protection, the credit quality of the guaranteed assets is enhanced. This is also known as credit risk mitigation. These principles are translated in the organization daily by



written procedures and policies that determine how guarantees are selected, up to which risk exposure and risk profile loans are quasi automatically granted and above which level a human expert evaluation is required (Bessis 2003). Larger or more complex files are typically discussed at a credit union committee where lending and credit risk that may be involved is discussed for possible transactions to be carried out. Credits that deteriorate and become too weak are put on a watch list, are closely monitored and remedial actions taken when it seems necessary for instance protection purchase.

#### **2.4.5 Diversification across Union Members**

The allocation process of SACCOs will provide a good diversification of the risk across various union members of different types, industry sectors and geographies like Kenya Banker's SACCO, Mwalimu SACCO, Kenya Bus Services SACCO, Kenya Planters Cooperative Society, Kenya Creameries Cooperative, Matatu SACCO Association, Cooperative Insurance Company, Mugama Farmers Co-operative Union Ltd, KENATCO Taxis Multipurpose Cooperative Society Ltd, among others. Diversification strategies spread the credit risk to avoid concentration of credit risk problems. Diversification is easier for large and international SACCOs (Bessis 2003). Risk reduction or mitigation implies that one takes part of the risk. For high-risk counterparts, one may require collateral that the credit unions can sell in case of default or the guarantees from a family pay the defaulted loan. The value of the sold collateral reduces the actual value and hence the risk for the credit union. Risk reduction may not always be feasible. One accepts or retains the risk that one has to take as part of the business strategy. Risk acceptance is typically applied for low-risk assets. Credit risk is more easily accepted when it is well diversified.

### **2.3 Empirical Literature Review**

Various scholars have conducted research on credit risk management practices. For instance, empirical studies made by Khan and Ahmad (2001) found that Banks face risks arising from profit-sharing investment deposits. Here, the bankers considered these unique risks more serious than conventional risks faced by financial institutions. The results of survey of risk perception in different modes of financing shows that risk level is considered elevated. The high perception of risks may be an indication of the low degree of active risk management due to the absent of risk

control through internal processes and control, especially in the case of operational risk (Iqbal and Mirarkhor, 2007) indicates that credit risk in banks perceived to be the most important risk.

Another survey by Freeman and Cox, 2006 on non financial corporations revealed that 52 per cent of respondent firms were concerned about managing their credit risk of these 18 per cent expressed a high concern. Indeed many firms are actively managing credit risk. An enron survey conducted by Smithson and Mengle, 2006 found that 36 per cent of the companies buy credit insurance, 32 per cent use letters of credit and 14 per cent use credit derivatives to manage credit risk. While non financial institutions had adopted cautious approach to credit derivative use, the overall level of trading in the credit derivatives market had doubled. This involve commercial banks and other financial institutions for which credit risk is now an important facet of risk management but also comprises a growing number of non financial institutions.

According to Boston Consulting Group (2001), the sole determining success factor is not the technical development but the ability to understand risk strategically and also the ability to handle and control risk organizationally. Secondly, in order to realize a risk based management philosophy, the attitude and mindset of the employees need to be changed whereby they must be brought to understand that managing credit risk is crucial for success. This implies that there must be intensive training, clearly defined structures and responsibilities, as well as commitment to change. Its findings are consistent with Muriuki (2007) who found out that Oil companies in Kenya involved their employees and senior management in developing credit risk management policies, use of manuals and regular training to sensitize their employees about credit risk management

Drzik (1995) mentioned that the Bank Administration Institute Risk Management Survey showed that large banks in the United States had made substantial progress in their development and implementation of risk measures. The measures were used not only for risk control purposes but also for performance measurements and pricing. Comprehensive risk measurement and mitigation methods for various risks arising from financing activities and from the nature of profit and loss sharing in the source of funds especially investment account holders are explained by Sundararajan (2007). He concludes that the application of modern approaches to risk measurement particularly for credit and overall banking risks is important for Banks. He also

suggested the need to adopt new measurement approaches critical for Banks because of the role they play and the unique mix of risks in finance contracts.

In relation to commercial banks' practice of risk management, Al-Tamimi (2002), found that the United Arab Emirates (UAE) commercial banks were mainly facing credit risk which they identified through inspection by branch managers and financial statement analysis methods. The main techniques used in risk management are establishing standards, credit score, credit worthiness analysis, risk rating and collateral. The recent study by Al-Tamimi and Al-Mazrooei (2007) conducted on banks' risk management of UAE national and foreign banks revealed that the three most important types of risks encountered by UAE commercial banks are foreign exchange risk, followed by credit risk and finally operating risk. However, these findings contradict with those of Njiru (2003), who established that the most important risk for banks was liquidity risk followed by credit risk and that they used forwards and swaps to manage these risks.

The empirical findings by Al-Tamimi and Al-Mazrooei (2007) highlighted that UAE banks are efficient in analyzing and assessing risk and there is a significant difference between UAE national and foreign banks in the practice of risk analysis and assessment. Additionally, the findings show that risk analysis and assessment influence risk management practices.

Mwirigi (2006) did an assessment of credit risk management techniques adopted by micro finance institutions in Kenya. He found out that a significant number 92.5% (37 out of 40 respondents) have credit risk management policies as a basis for objective credit risk appraisal and that they involved their employees in developing the risk management policies. Most of the institutions used the manual to sensitize their employee about credit risk management. Although the findings gave a positive relationship between credit risk management policies and risk reduction, it would have been fair to use alternative avenues to sensitize the staff on credit risk like training through seminars which would have probably improved the results.

Another study on credit risk management by coffee cooperatives in Embu District by Njiru (2003), who found out that none of the 24 cooperative societies used quantitative methods to evaluate credit worthiness of their members instead they used qualitative methods only like the

6C's technique that is character, capacity, condition collateral, capital and control to a small extent. He also observed that large societies manage their credit risks better than the small ones since they have a lower level of default. This was attributed to the fact that large societies employed qualified and experienced staff.

In addition he found out that there were two credit models employed in Kenya by financial institutions offering micro credit namely the Grameen ( group based) model and the individual loan model. Banks based their products on individual loan model while majority of the MFIs products were based on Grameen model. He asserted that whichever model used a product had equal chance of success. However he said that the products under the individual model were likely to do poorly than those under the Grameen model if other factors were not well managed.

In relation to Micro Finance institutions' practices of credit risk management in Kenya, Simiyu (2008), found out that out of the sample of 30 MFIs, 74 per cent of them use 6C's technique as the basic tool when lending. These findings agree with those of Wambugu (2008) who found out that the 6C's are important reference indexes for financial institutions when making credit analysis to decide worthiness of a borrower.

Simiyu also found that MFIs use follows ups to avoid loan losses, keep proper documentation and take litigations in situations where the borrower situation and structure have been altered and original value of collateral differ. Majority of the institutions used credit matrix to measure the credit migration and default risk. Further he stated that loan portfolio management and operational efficiency management are the most important to consider in credit risk management as they are the most important in enhancing the performance. This implies that MFIs are well prepared to avoid any loan losses by employing credit management practices.

In an empirical investigation into portfolio performance measures by pension fund managers and the challenges they face in portfolio management in Kenya, Ngene (2002) established that the challenges include taxes, investor preferences, portfolio constraints, lack of knowledge from consultants and cultural hurdles. The study thus shows that these challenges led to reduction in return on assets, financial self sufficiency and portfolio yield. It was also clear that multi-

divisional firms sometimes over invest capital in weak divisions and under invest it in stronger ones; and this adversely affects the profitability of the entire business group.

According to Ndung'u (2003), sound asset and liability management have significant influence on profitability due to reduced risks. Among the external factors, high market interest rate was found to have an adverse effect on financial institution's profitability in Kenya. The study also found that the prerequisites to operational efficiency include the adaptation of an effective service delivery methodology and significant institutional competence in such areas as delinquency control, information management, and staff development.

Mwisho (2001) indicated that good credit risk management starts with good selection of the counterparts and products. Good risk assessment models and qualified members are key requirements for a good selection strategy. Important credit decisions are made at credit committees and for counterparts with a higher default risk, more collateral is required to reduce recovery risk. Recovery risk is also reduced by requiring more stringent covenants for example on asset sales.

On the contrary, according to Kidanu (2008) on a study in the status of RUSACCOs in Ethiopia, even with proper credit management policies, risks can be enhanced. This is due to incompetent personnel, uncertainty of loans availability to members among others. Therefore, while the above research outcomes provide valuable insights in credit risk management, there is need to resolve the above controversy surrounding the credit risk management practices in SACCOs in Nairobi.

## **2.4 Summary of Literature Review**

Generally, from almost all surveys reviewed in the literature, it is evident that credit risk management is essential in optimizing the performance of financial institutions as well as that of SACCOs. In addition, an effective credit risk management involves establishing an appropriate credit risk environment, operating under a sound credit granting process, maintaining appropriate credit administration that involves monitoring process as well as adequate controls over credit risk.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research design and methodology that will be used to carry out the research. It presents the research design, the population, sample size and sampling procedure, data collection and data analysis.

#### **3.2 Research design**

Research design refers to the way the study is designed, that is the method used to carry out the research (Mugenda, 2008). Descriptive Research is the investigation in which quantity data will be collected and analysed in order to describe the specific phenomenon in its current trends, current events and linkages between different factors at the current time. Descriptive research design is chosen because it enables the researcher to generalise the findings to a larger population.

The study will focus on the SACCOs in Nairobi because it hosts most headquarters of the major SACCOs in Kenya and it is easily accessible by the researcher. This study will therefore be able to generalise the findings of all the SACCOs in Kenya.

#### **3.3 Target Population**

Target population can be defined as a compute set of individuals, cases/objects with some common observable characteristics of a particular nature distinct from other population. According to Mugenda and Mugenda (1999), a population is a well defined as a set of people, services, elements and events, group of things or households that are being investigated. The population of this study will be all the SACCOs in Nairobi. There are 200 active SACCOs in Nairobi (Ministry of Co-operative Development and Marketing 2008). This is the group from which the sample shall be drawn.

### **3.4 Sampling and sampling procedure**

Systematic random sampling method will be used to select the thirty five (35) SACCOs in Nairobi from the target population. The sample size will be appropriate since it is greater than 30 ( $n > 30$ ). The method spreads the sample more evenly over the population and is easier to conduct (Mugenda and Mugenda 1999). The researcher will use systematic random sampling because it gives equal chance of selection of the sample units since from the target population, a starting point is chosen at random, and thereafter at regular intervals of five.

### **3.5 Data collection procedures and instruments**

#### **3.5.1 Piloting**

Piloting will be carried out to test the validity and reliability of the instruments. Validity indicates the degree to which the instrument measures the constructs under investigation (Mugenda and Mugenda, (1999). There are three types of validity test which include content, criterion and related construct validity. This study will use content validity because it will measure the degree to which the sample of the items represents the content that the test is designed to measure.

A pilot study will be conducted by the researcher taking questionnaires to a few SACCOs headquarter in Nairobi which will be filled by some respondents at random. From this pilot study the researcher will be able to detect questions that need editing and those that are ambiguous. The final questionnaire will then be printed and used to collect data that will be used for analysis.

#### **3.5.2 Data Instruments**

The Researcher will develop the instruments with which to collect the necessary information. Questionnaires will be used to obtain important information about the population. According to Sproul (1998), a self administered questionnaire is the only way to elicit self report on people's opinion, attitudes, beliefs and values. The questionnaire will contain both closed-ended and also a few open ended questions. These types of questions will be accompanied by a list of possible alternatives from which respondents are required to select the answer that best describes their

situation. The main advantage of close ended questions is that they are easier to analyse since they are in an immediate usable form, they are easy to administer because each item is followed by an alternative answers and also they are economical to use in terms of saving time and money.

### **3.5.3 Data Collection procedure**

The research will be carried out using primary and secondary data. Primary data is the information the researcher will obtain from the field. Primary data will be collected using semi-structured questionnaires. The questionnaires will be administered using drop and pick method. The questionnaires will be used because they allow the respondents to give their responses in a free environment and help the researcher gather information that would not have been given out had interviews been used. The questionnaire will be self-administered to some respondents while for others the researcher will administer.

### **3.6 Data analysis and presentation**

The researcher will use qualitative and quantitative techniques in analyzing the data. After receiving questionnaires from the respondents, the responses will be edited, classified, coded and tabulated to analyze quantitative data using Statistical Package for Social Science (SPSS) version 17.0. Tables and charts will be used for presentation for easy understanding. This will be coupled with factoring analysis on qualitative issues to generalize the results. Factor analysis measures the factors that are deemed to contribute most to a particular issue under investigation, such as credit risk management practices, based on statistics drawn from questionnaire responses. On the compilation of the statistics factor analysis is done using SPSS to come up with the key factors that influence credit risk management practices in SACCOs.



## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS AND INTERPRETATION

#### 4.1 Introduction

This chapter presents the analysis of the data collected and interpreted on the assessment of credit risk management practices adopted by SACCOs in Nairobi.

#### 4.2 Data Collected and Analysed

Questionnaires were distributed to the sampled 35 SACCOs in Nairobi 31 responded 4 declined to respond. This represents a response rate of 88% of the total population, which is considered significant enough to provide a basis for valid and reliable conclusions with regard to credit risk management practices adopted by SACCOs. The questionnaires were administered using drop and pick later method. The data was collected from managers, credit managers and credit officers. The SACCOs that did not respond gave various reasons such as sensitivity of financial information requested, fear of misuse of the information requested while others said that the senior officials who would authorise release of this information were absent.

**Table 4.1 Overview of Data Collected**

Population	Number of targeted SACCOs (n)	Returned Questionnaires (r)	Non- Response rate (t-r)
SACCOs	35	31	4

Key: n = population; r = Returned Questionnaires; n-r = Non-response Error (12%)

### 4.3 Descriptive Statistics

#### 4.3.1 Methods used in bringing credit risk awareness to staff

**Table 4.2 Methods of credit risk awareness**

Method	Not at all	Least	Moderate	Most used
Use of Credit Manuals		5	19	7
Regular training		9	15	7
Using supervision	1	4	15	11
Regular meetings	1	3	15	12

The most popular methods of promoting credit risk awareness amongst staff in SACCOs are through regular meetings and supervisions on one on one basis. The use of credit manuals is also regularly used but its application goes hand in hand with regular meetings and supervision. Regular training also features amongst the awareness methods but less prominently than the other three methods.

#### 4.3.2 Credit default policy

**Table 4.3 Credit default period**

Period	Not at all	Least	Moderate	Most used
1 month late payment		7	11	11
3 months late payment	1	1	5	22
6 months late payment	5	6	12	6
more than 12 months late payment	5	4	13	7

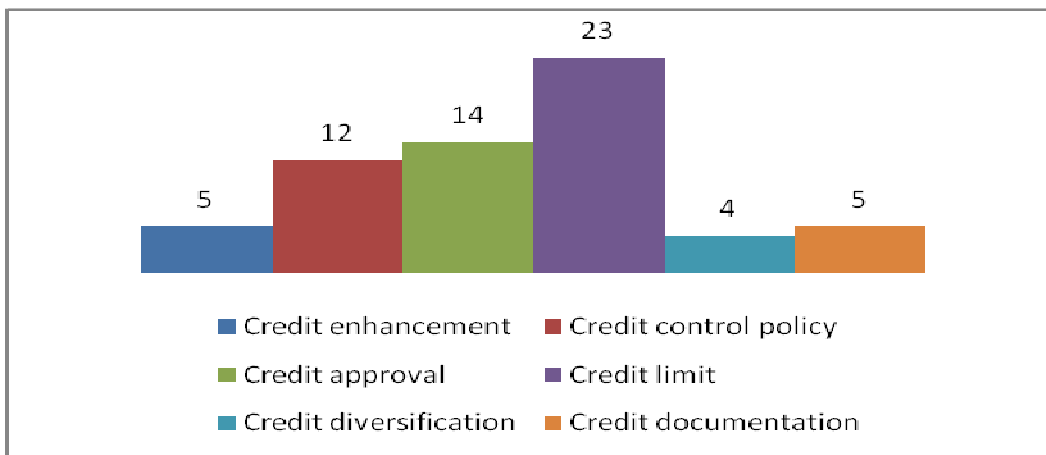
Most SACCOs followed the 3-months (90 days) credit default policy as indicated by the table above. Of the 31 SACCOs interviewed, 22 stated that they mostly use the 3-month late payment period as the benchmark for credit default. However, it also became apparent that the SACCOs

use a combination of credit default policies as opposed to just sticking to one but all in all the 90-day late payment was the most popular followed by the 1-month (30-day) benchmark.

In addition, 28 of the 31 SACCOs interviewed stated that they review their credit policy annually while the remainder review their credit policy half-yearly. Further, the majority (28) of the respondents agreed that credit risk management practices have impacted positively to their organizations by ensuring efficiency in carrying out its obligations and in meeting its objectives.

### 4.3.3 Favoured credit risk management practices in managing credit risk exposure

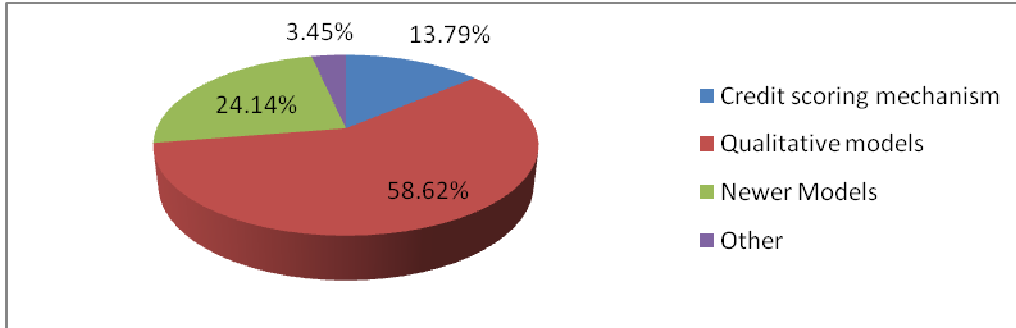
**Chart 4.1 Favoured credit risk management practices**



Credit risk managers in SACCOs use a combination of methods but the most favoured one was the credit limit followed by credit approval and credit control policy respectively as shown in the graph above. The credit limit does not only cap the upside risk but it also ensures a wider distribution of loans to SACCO members as no one person or group can get a disproportionately high loan amount at the expense of others members soliciting for loans.

#### 4.3.4 Credit risk measurements used by SACCOs

**Chart 4.2 Credit risk measure(s) used by SACCOs**



Most of the SACCOs interviewed indicated that they used qualitative methods while the credit scoring system was applied by very few. This may be indicative that SACCOs have not enhanced their capacity for credit assessment and may thus need to investment more in objective systems rather than relying on subjective approaches such as the qualitative approach. On the other hand, most SACCOs lend to members who in many cases have a consistent monthly income stream and as such they use these streams of income as security. As a result, they may not need a complex measurement system to regulate credit given that client incomes are to a large extent predictable and consistent.

### 4.3.5 People responsible for credit policy formulation

**Table 4.4 Credit policy formulation panel**

People	Not at all	Least	Moderate	Most used
Executive management	1	3	12	15
Board of directors			12	19
Credit committee		2	9	20
Credit managers		1	12	18
Employee suggestion		4	18	9

Credit committees, boards of directors and credit managers respectively for the most part are responsible for credit policy formulation in the SACCOs interviewed. The executive management also registered a sizeable impact on credit policy albeit somewhat diminished when compared to the first three avenues of credit policy formulation.

### 4.3.6 Credit risk management practices in the respective SACCOs

**Table 4.5 Credit risk management practices**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Credit decisions are made after standardization	11	10	10		
Credits must be monitored and reviewed	24	7			
Portfolio managers should watch over the loan	21	6	4		
Member lending facility is reported to the credit	11	15	4		1
Risk management practices are monitored and set	13	9	9		

Most respondents agreed on two things; credit must be monitored and reviewed and that portfolio managers should watch over the loan. This is reflective of the operations of most SACCOs in which there is regular monitoring of the loans and loan portfolio managers are made to account for loan performance.

### 4.3.7 Initial screening and risk assessment factors to SACCO lending

**Table 4.6 Screening and risk assessment factors**

Factor	Not at all	Least	Moderate	Most used
Character of borrower		1	9	21
Capacity	1		17	13
Conditions			15	16
Collateral/ Security		1	16	14
Other				

The character of the borrower was the most prominent criteria used in screening of potential borrowers amongst the 31 SACCOs. The SACCOs also set some conditions mainly involving

duration of membership and amount saved. Collateral was also used but it was not the core criteria given that most SACCOs are able to attach member's incomes (salaries) and hence use these income flows as security. On the other hand, SACCOs that do not deal with salaried members, such as those comprising business people and artisans, are keener on collateral.

#### 4.3.8 Methods of loan recovery for clients experiencing difficulty in repayment

**Table 4.7 Methods of loan recovery**

	Not at all	Least	Moderate	Fair	Great
Letters of credit and telephone calls	5	9	9	2	6
Sale of the property to recover money	12	13	3	3	
Write the debt off and account it as bad debt	6	14	6	4	
Write off interest and allow them to pay principal	7	12	4	7	1
Debt collection agencies	11	8	7	3	2
Legal action	12	8	3	7	
Other	1				

The responses brought out the fact that SACCOs try to avoid sale of property, debt collection agencies and legal action and as such these three loan default redress mechanisms are normally applied as a last resort. However, the SACCOs also try to avoid debt and interest write offs and instead prefer loan renegotiation and restructuring. All in all, letters of credit and telephone calls appear to be the most preferred first line of defence in dealing with clients who fall behind their loan repayment schedules.

#### 4.4 Factor Analysis

**Table 4.8 Total Variance Explained**

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.336	90.516	90.516	6.336	90.516	90.516
2	.401	5.733	96.249			
3	.260	3.709	99.958			
4	.003	.042	100.000			
5	2.344E-16	3.349E-15	100.000			
6	9.467E-17	1.352E-15	100.000			
7	-2.447E-17	-3.495E-16	100.000			

Extraction Method: Principal Component Analysis.

<b>Component (Factor)</b>	<b>Description</b>
1	Sound credit risk management practices are built on good-quality portfolio management
2	credit risk management is essential to optimizing the performance of the SACCO
3	Credit unions have adopted credit documentation as a way of managing credit risk
4	Better portfolio monitoring and delinquency tracking through the use of appropriate reporting tools help in delinquency management
5	Credit officers must possess adequate appraisal and monitoring skills, experience and good knowledge of credit risk management practices
6	Customers are offered good free consultant services
7	The use of collateral particularly fixed assets to recover defaulted loans is successful to some extent in loan default recovery



The factor analysis indicates that 90.5% of the respondents believe that sound credit risk management practices are built on good quality portfolio management while 5.73% give credence to credit risk management as being essential for optimizing the performance of the SACCO. This is indicative that the SACCOs interviewed tend to focus on the quality of portfolio management but have not to a large extent assimilated credit risk management processes and tools as being part and parcel of sound credit portfolio management.

### **4.3 Summary and Implications of Findings**

The most popular methods of promoting credit risk awareness amongst staff in SACCOs are through regular meetings and supervisions on one on one basis. Of the 31 SACCOs interviewed, 22 stated 3-months (90 days) credit default policy. In addition, 28 of the 31 SACCOs interviewed stated that they review their credit policy annually while the remainder review their credit policy half-yearly. Further, the majority (28) of the respondents agreed that credit risk management practices have impacted positively to their organizations by ensuring efficiency in carrying out its obligations and in meeting its objectives.

Credit risk managers in SACCOs use a combination of methods but the most favoured one was the credit limit followed by credit approval and credit control policy respectively. Most of the SACCOs interviewed indicated that they used qualitative methods while the credit scoring system was applied by very few. Most respondents agreed on two things; credit must be monitored and reviewed and that portfolio managers should watch over the loan. This is reflective of the operations of most SACCOs in which there is regular monitoring of the loans and loan portfolio managers are made to account for loan performance. However, this is also reflective of the fact that most SACCOs do not have, to a large extent, standardized approaches to credit risk management and much is left to the discretion of the portfolio managers. Perhaps this also explains why the SACCOs rely on more subjective lending criteria through the use of qualitative models as opposed to the more objective credit scoring approaches.

The factor analysis results also attests to the emerging trend in which there is a heavy reliance on the discretion and ability of portfolio managers for effective credit risk management practices as opposed to a system of that standardizes credit and credit risk decisions.

## **CHAPTER FIVE**

### **SUMMARY OF THE FINDING AND CONCLUSION, RECOMMEDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH**

#### **5.1 Introduction**

The objective of the study was to identify the credit risk management practices adopted by SACCOs in Nairobi. To satisfy the objective of the study, primary data was collected by use of questionnaires from 30 SACCOs. The primary data was supplemented by information obtained from brochures and direct interviews to clarify answers on the questionnaire.

Conclusions on the study are deduced and subsequently policy recommendations for SACCOs are indicated. Thereafter limitations encountered by the study are enumerated and suggests areas for further study stated.

#### **5.2 Conclusions**

The study findings show that the most popular methods of promoting credit risk awareness among the staff in SACCOs are through regular meetings and supervisions on one on one basis. Of the 31 SACCOs interviewed, 22 stated 3-months (90 days) credit default policy. In addition, 28 of the 31 SACCOs interviewed stated that they review their credit policy annually while the remainder review their credit policy half-yearly. The fact that most SACCOs prefer to review credit policy annually may be compounded by issues of size and logistics as some of them have countrywide or regional reach and as such frequent changes in policy may lead to a dysfunction in their operations.

Further, there seems to be a consensus amongst industry players about the impact of credit risk management on the operations of SACCO. In this regard, the majority (28) of the respondents agreed that credit risk management practices have impacted positively to their organizations by ensuring efficiency in carrying out its obligations and in meeting its objectives.

Credit risk managers in SACCOs use a combination of methods but the most favoured one was the credit limit followed by credit approval and credit control policy respectively. Most of the

SACCOs interviewed indicated that they used qualitative methods while the credit scoring system was applied by very few. Most respondents agreed on two things; credit must be monitored and reviewed and that portfolio managers should watch over the loan. This is reflective of the operations of most SACCOs in which there is regular monitoring of the loans and loan portfolio managers are made to account for loan performance. However, this is also reflective of the fact that most SACCOs do not have, to a large extent, standardized approaches to credit risk management and much is left to the discretion of the portfolio managers. Perhaps this also explains why the SACCOs rely on more subjective lending criteria through the use of qualitative models as opposed to the more objective quantitative methods such as credit scoring. The study corroborates that of Njiru (2003) study on credit risk management by coffee cooperatives in Embu District which found that none of the 24 cooperative societies used quantitative methods to evaluate credit worthiness of their members.

The factor analysis results also attests to the emerging trend in which there is a heavy reliance on the discretion and ability of portfolio managers for effective credit risk management practices as opposed to a system of that standardizes credit and credit risk decisions.

### **5.3 Policy Recommendations**

The findings of the study have demonstrated that for the most part SACCOs rely on the discretion and skill of the portfolio managers for effective credit risk management and this of itself is indicative of the absence of a standardized and objective credit risk management system in most SACCOs. As they expand to incorporate more members in the various regions of the country the approach of relying on individual managers may prove to be inadequate and serve to increase the loans defaults. Accordingly, it is imperative that SACCOs adopt standardized credit risk management practices to avert the risk of default emanating from personalized systems.

### **5.4 Limitations of the Study**

This study had the limitation of being qualitative in nature and as such did not assess the financial performance of the SACCOs to back the questionnaire findings on the impact of credit risk practices on the operating efficiency of SACCOs.

The scope of the study was very much restricted geographically to SACCOs in the environs of Nairobi due to the limitation of time.

### **5.5 Suggestions for further study**

Given the qualitative nature of the study there is need for a study that assess the link between financial performance of the SACCOs and their credit risk management practices.

In this age of micro finance advocacy a study may also be conducted to assess the economic impact of SACCO loans on the members who borrow from them and see whether there has been a marked improvement in their economic welfare on borrowing the loans.

## APPENDICES

### Appendix 1: Letter

University of Nairobi

School of Business

Department of Finance and Accounting

P.O BOX 30197, Nairobi.

15<sup>th</sup> October, 2010

To Whom It May Concern,

**RE: MARY WANGUI GAITHO: REGISTRATION NO D61/9129/2006**

The above mentioned student is in the Masters of Business Administration program. As part of requirements for the course she is expected to carry out a study on Credit Risk Management practices in SACCOs.

She has identified your organization for that purpose and a copy of the final paper will be availed to your organization on request.

Your assistance will be greatly appreciated.

Yours Sincerely,

**MBA CO-ORDINATOR**

## Appendix 2: Questionnaire

### Part A: General information

Name of the SACCO (optional) .....

Number of years the SACCO has been in service .....

How long have you been in the SACCO.....

Designation of the respondent .....

Number of employees in the SACCO

1-250 [ ]

251-500 [ ]

501- 750 [ ]

751-1000 [ ]

Over 1000 [ ]

Types of loans given

Development loans [ ]

School fees loans [ ]

Emergency loans [ ]

Others (specify) [ ]

**Part B: Credit Risk Management Practices**

1. What ways does your SACCO employ to bring credit risk awareness to staff?

Using supervision on one to one basis				
Regular meetings				

2. When does your organization decide that a client has defaulted on loan repayment?

More than twelve late months				

3. How regularly do you review your credit policy?

Quarterly..... [ ]

Half yearly ..... [ ]

Yearly..... [ ]

Other specify .....

4. To what extent do you agree with the statement, credit risk management practices in SACCOs ensure efficiency in its obligations and meeting its objective?

Strong Disagree [ ]

Disagree [ ]

Neutral [ ]

Agree [ ]

Strongly Agree [ ]

5. Is it important for SACCOs to manage credit risks that it's exposed to?

Yes [ ]

No [ ]

If yes, explain your answer.....

.....

6. Which practices among the following do you consider when managing credit risk exposure?

a) Credit enhancement [ ]      b) Credit control policy [ ]

c) Credit approval [ ]      d) Credit limit [ ]

d) Credit documentation [ ]

e) Diversification across union members [ ]

f) Any other specify .....

7a). Do you use any credit risk management measures in your SACCO?



Yes [ ]

No [ ]

b). If yes please indicate which credit risk management measures used. (Tick where applicable)

Credit Scoring Mechanism..... [ ]

Qualitative models ..... [ ]

Newer models ..... [ ]

Other specify .....

For questions 8 up to 12, Tick appropriately where 1 represents least considered and 5 represents most considered.

8. Tick below the people who formulate your credit policy.

People	Not at All	Least	Moderate	Most
Executive management				
Board of directors				
Credit committee				
Credit managers				
Employees' suggestions				

9. To what extent do you agree with each of the following statement about credit risk management practice in your SACCOs?

Procedure	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Credit decisions are made after standardization process and documentation is required.					
Credits must be monitored and reviewed periodically for quality credit control.					
Portfolio managers should watch over the loan portfolio's degree of concentration and exposure.					
Member lending facility is reported to the credit risk management committee.					
Risk management practices are monitored and set by the credit committee					

10. Which factor(s) among the following does your SACCO use as an initial screening and risk assessment device before awarding credit to a customer?


Any other, Specify.....

11. To what extent does your SACCO apply the following methods in loan recovery when it is difficulty for the client to repay the loan on time?

Method	Not at all	Least extent	Moderate	Fair extent	Great extent
Letters of credit and telephone calls.					
Sale of the property to recover the money.					
Write the debt off and account it as bad debts.					
Write off interest and allow them to pay the principle.					
Debt collection agencies.					
Legal action.					

Any other, specify, Please specify.....

12. To what extent do you agree with each of the following statement about credit risk management in your SACCOs?

Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Credit risk management is essential to optimizing the performance of the SACCO					

Sound credit risk management practices are built on good-quality portfolio management.					
Credit unions have adopted credit documentation as a ways of managing credit risk.					
The use of collateral particularly fixed assets to recover defaulted loans is successful to some extent in recovering defaulted loan.					
Better portfolio monitoring and delinquency tracking through the use of appropriate reporting tools help in delinquency management.					
Credit officer's must posses adequate appraisal and monitoring skills, experience and good knowledge of credit risk management practices.					
Customers are offered good free consultant service.					

### **Appendix 3: List of SACCOs**

- 1 KENCOM SACCO
- 2 MWALIMU SACCO
- 3 JAMII SACCO
- 4 KENPIPE SACCO
- 5 TAIFA SACCO
- 6 CHUNA SACCO
- 7 WOMEN FINANCE TRUST SACCO
- 8 SAUTI SACCO
- 9 JUMBO SACCO
- 10 LAMPASAGO SACCO
- 11 CROSS TRACK SACCO
- 12 ABIB SACCO
- 13 KENYA UNION SACCO
- 14 RIVE BANK SACCO
- 15 MACHO SACCO
- 16 KIMISITU SACCO
- 17 COMACO SACCO
- 18 KABRAS SACCO
- 19 NYATI SACCO
- 20 WANANDEGE CO-OP SACCO
- 21 MAGEREZA SACCO
- 22 CHAI FARMERS SACCO
- 23 CO-OPERATIVE BANK SACCO
- 24 STIMA FINANCE TRUST SACCO
- 25 HARAMBEE SACCO
- 26 NCWS SACCO
- 27 JOGOO COOPERATIVE SOCIETY LTD
- 28 POSTBANK SACCO
- 29 KENYA BANKERS SACCO
- 30 AFYA SACCO
- 31 NACICO SACCO

## REFERENCES

- Al-Tamimi, H. (2002) "Risk Management Practices: *An Empirical Analysis of the UAE Commercial Banks*". Finance India, Vol. XVI, pp. 1045-1057.
- Al-Tamimi, H. and Al-Mazrooei M. (2007) "Banks' Risk Management: A Comparison Study of UAE National and Foreign Banks". *The Journal of Risk Finance*, Vol. 8 No.4, pp. 394-409.
- Barth, J.R., Caprio, G. Jr, Levine, R. (2004) "Bank Regulation and Supervision: what works best?" *Journal of Financial Intermediation*, Vol. 13 pp.205-48.
- Basel (2010), "Principles for the management of credit risk", Consultative paper issued by the Basel Committee on Banking Supervision, *Basel*, April 2010
- Bessis, J. (2003) *Risk Management in Banking* (2nd edition), John Wiley & Sons, Chichester, New York,
- Boston Consulting Group (2001), *From Risk Taker to Risk Manager: Ten Principles for Establishing a Comprehensive Risk Management System for Banks*, May 20-21, 2001,
- Boston Consulting Group (2006), *Core Principles Methodology*, Basel Committee on Banking Supervision, *Bank for International Settlements*.
- Caoutte, J. B., E. I. Altman and P. Narayanan 1998, *Managing Credit Risk: The Next Great Financial Challenge*. John Wiley and Sons, New York,
- De Jong, D. (2006). A brief history of savings and credit co-operatives, Retrieved on 19 February 2009. From, [www.saccol.org.za/SACCOs.htm](http://www.saccol.org.za/SACCOs.htm)
- Derban, W.K., Binner, J.M. and Mullineux, A. (2005) "Loan repayment performance in community development finance institutions in the UK", *Small Business Economics*, Vol. 25 pp.319-32.
- Drzik, J. (1995) "Survey on, Moving towards Comprehensive Risk Management". *Bank Management Journal*, Vol.71, pp.40.

- Financial Sector Deepening, (2009), *Saving Credit Cooperative Societies Large SACCO Restructuring Facility outline*, Retrieved 18 February 2010, from, [www.fsdkenya.org](http://www.fsdkenya.org).
- Freeman, Cox and Wright (2006), *Credit Risk Management; the use of Credit Derivatives in non Financial Corporations*. Managerial Finance, vol 32 pp 761-773 Emerald publishing.
- Greuning, H. and Bratanovic, S.B. 2003, *Analyzing and Managing Banking Risk*, A Framework for Assessing Corporate Governance and Financial Risk. 2nd edition, The World Bank, Washington, DC.
- Iqbal, Z. and Mirakhor, A. (2007) “*An Introduction to Islamic Finance: Theory and Practice*”, John Wiley & Sons, Singapore
- Kidanu B. (2008), The status of RUSACCOs in Ethiopia. Presented to EACRAT Workshop held on 22 – 24 July 2008 .Addis Ababa Ethiopia
- Khan, T., and Ahmed, H. (2001), “Risk Management: An Analysis of Issues in Financial Industry” IRTI/IDB Occasional Paper, No. 5.
- Lintner. G. (1965), Value at Risk: Implementing a Risk Measurement Standard, Working Paper 96-47, Wharton Financial Institutions Center, The Wharton School, University of Pennsylvania, 1996.
- Sproul Michael (1998), The Quantity Theory versus the Real Bills Doctrine in Colonial America. In Economics *Working Papers*.
- Margrabe, T (2007), Governing the Corporate Risk Management Function, in Frenkel, M. Hommel, U. and Rudolf, M. 2005, Risk Management: Challenge and Opportunity, Springer.
- Mc Menamin J. (1999), Financial Management, An Introduction. New York.
- Ministry of Co-operative Development and Marketing (2007), Investment Policy and guidelines for Co operative sector.

- Ministry of Co-operative Development and Marketing (2008), Investment Policy and guidelines for Co operative sector.
- Mugenda, A. G. (2008), Social Science Research: Theory and Principles. Nairobi, Arts Press.
- Mugenda, O.M and Mugenda A.G. (1999), Research Methods. *Act Press. Nairobi.*
- Muriuki M. Mutwiri (2007), Credit Risk Management practices by oil Companies in Kenya. *Unpublished MBA Research Project, University of Nairobi.*
- Mwirigi P. Kwagara (2006), An Assessment of Credit Risk Management techniques adopted by micro finance institutions in Kenya. *Unpublished MBA research project, University of Nairobi.*
- Mwisho, A.M. (2001), “Basic lending conditions and procedures in commercial banks”. *The Accountant*, Vol. 13 No.3, pp.16-19
- Newsletter, 2009 “Financial Sector Deepening” *World Council of Credit Unions*, Issues, January
- Ngare E. Magara 2008, A Survey of Credit Risk Management Practices by Commercial Banks in Kenya .*Unpublished MBA research project, University of Nairobi.*
- Ngene G.M. (2002) empirical investigation into portfolio performance measures by pension fund managers and the challenges they face in portfolio management in Kenya. Unpublished MBA project. University of Nairobi.
- Njiru G.M 2003, Credit Risk Management by Coffee Coops in Embu District. *Unpublished MBA research project University of Nairobi.*
- Ndungu B.M (2003), Determinants of liquidity of equity stocks listed at the NSE. *Unpublished MBA research project, University of Nairobi.*
- Planet Rating East Africa 2007, Survey of Growth of Saving and Credit Society Report, *Mutara Development SACCO*, Uganda, February.1
- Pykhtin, M. 2005, *Counterparty Credit Risk Modelling: Risk Books*, Incisive Media, London,



- Ross. H (1976), *Inherent Risk: Credit and Market Risks* in Archer, S. and Karim, R. A. A. 2007, *Finance: The Regulatory Challenge*, John Wiley and Son (Asia) Pte Ltd.
- Richard, E. 2006, *Credit Risk Management Policy and Strategies: The Case of a Commercial Bank in Tanzania*, BA Publications.
- Saunders, A. and Cornett, M.M. 2002, *Financial Institutions Management: A risk management approach* (4th edition). McGraw Hill, New York.
- Simiyu R. Silikhe, 2008, A survey of techniques of credit risk management in Micro finance institutions in Kenya. *Unpublished MBA research project, University of Nairobi*.
- Smithson C. and Mingle G. (2006), The promise of credit derivatives in non financial corporations, *Journal of applied Corporate Finance*. Black Well publishing. 18(4), 54-60
- Sharpe. G (1964), *Risk assessment and management: the engineering approach*, Centre for Industrial Safety and Reliability, Cranfield University., unpublished paper.
- Shanmugam, B., Bourke, P. 1992, "Biases in Appraising Creditworthiness", *International Journal of Bank Marketing*, Vol. 10 No.3, pp.10-16.
- Sundarajan, V. 2007, "Risk Characteristics of Product", *Implications for Risk Measurement and Supervision* 25, Pg. 36-50.
- Tummala, V.M. and Burchett, J.F. 1999, "Applying a risk management process to manage cost risk for EHV transmission line project": *International Journal of Project, Management*, Vol. 17 No.4, pp.223-35.
- Wambugu S. Maina 2008, A Survey of Credit Risk Management Practices by Micro-Finance Institutions in Kenya. *Unpublished MBA research project, University of Nairobi*.
- World Council of Credit Unions, 2005, "*Credit Union Best Practices*." Retrieved 3<sup>rd</sup> March 2010. (Online topical documents available at:<http://www.woccu.org>)