A SURVEY OF RISK MANAGEMENT PRACTICES BY SACCOS IN KENYA

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D61/70201/2007

A MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE MASTER OF BUSINESS AND ADMINISTRATION (MBA) FACULTY OF COMMERCE

NOVEMBER, 2010

DECLARATION

I declare that this study is my original work and has never been presented for examination in any University.

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This research has been submitted for examination with my approval as the University Supervisor

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DEDICATION

This project is dedicated to my mother Mrs. Deborah Akeyo

ACKNOWLEDGEMENT

I would like to thank the Almighty God through the care and love of His son Jesus Christ for making this work possible.

I would like to express my gratitude to my supervisor Mr. Karanja for his guidance, motivation and patience through out this project.

I sincerely feel indebted to my wife Victoria Ajema who acted many times as my research assistant both in libraries and at home. You calmed me down when "things were array" especially when it came to the tedious job of identifying, selecting and arranging all articles on environmental safety in the 360 editions of the Standard and Nation newspapers and collecting questionnaires. Thanks too for reviewing my work. Special thanks to Angela Githinji for your assistance as my research moderator. Thanks brethren, God bless you!

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ABSTRACT

A survey with 43 sacco was conducted in Nairobi, Kenya to examine the Risk Management Practices by Saccos in Kenya. Data was collected from respondents using questionnaires and it was analysed using SPSS version 17.

The study investigated how risk management affects sacco, Risk involved and Risk management controls. On establishing how risk management affects saccos in Kenya, the study was guided by different questions, which include approved risk management policies where slightly above half of the respondents had not approved risk management policy. On the approval of risk management policy, majority of the respondents said that their organization had an approved risk management policy and was approved by the audit committee.

The research findings also showed that few Sacco had put in place risk management policies to guide it in preventing risk, there is need to have other ways to detect risk when problems are arising within the organization that would put them out of business.

The study findings reveals that saccos do face some problems of liquidity, lack qualified staff, technological challenges, which included qualified personnel on IT departments; there was also lack of enough manpower and high turnover of employees.

CHAPTER ONE

INTRODUCTION

1.0 Background

Sacco's are non profit making organizations in nature essentially Sacco's are financial intermediaries just like commercial banks linking deficit economic unit with units that have surplus. Their existence hinges on transaction cost reduction. It is estimated that currently(2010) Sacco's have a total wealth of Kshs. 200 billion and are increasingly becoming a key player in major sectors of the economy. Deposits alone stand at Shs.150 billion which funds are regularly issued as school fees and development loans to members thus raising educational and economic standards. Some of these funds are invested as fixed deposits by banks who lend to other citizens for income generation purposes according to the ministry of co-operative and marketing strategic plan 2008-2012. In Kenya there are more than 2.5 million members in Savings and Credit Co-operatives (SACCOs) out of the 5 million Co-operators while there are 3,000 SACCOs out of the 10.000 registered Co-operatives. The savings mobilized by SACCOs in Kenya are Kshs.110 billion (US$1.5 billion) and the loans outstanding Kshs.95 billion (US$1.3 billion) according to Munyiri (2008)

Financial cooperatives in some African countries referred to as Sacco - Savings and Credit Cooperatives are institutions that have grown up from the base and are therefore organized in close proximity to the communities they serve. Typically they are often located in rural areas or in communities that are ignored by other institutions. However, no matter how far they reach, cooperatives still must perform efficiently in delivering their products and services to their members at the lowest cost. In both East and West Africa, their creation dates back over two to three decades ago. Saccos cover and provide

financial services to the urban employed labour force, rural agricultural farmers and informal sector workers WOCCU, (2006).

When financial institutions withdrew their banking services from rural areas and due to employers' failure to remit recoveries to Saccos, it became necessary for them to start Front Office Services (FOSA) to serve their members. These Fosas provide services that include withdrawable savings, fixed deposit facilities, salary payment, advances and other accounts all savings are retained for onward lending to its members. woccu, (2006).
Sacco's must manage risk if they are to survive and prosper. The risk management function primary responsibility is to understand the portfolio risk that the Sacco is currently taking and the risk it plans to take in future. It must decide whether risks are acceptable and if they are not acceptable what actually to be taken. There is a trade off between risk and return when money is invested; the greater the risk taken the higher the return that can be realised. The trade off is between risk and expected returns (Pandy, 2005).

Sacco's with Fosas offer a much broader range of services to broader clientele. Deposit services offered typically include business accounts, savings accounts, and fixed deposits. Loan services include school fee loans, advances and personal loans to salaried member, advances (for example, to dairy farmers and tea out growers) and loans to farmers, and revolving credits to business clients, microfinance loans (often through groups), and development loans for purchase of equipment, land, buildings etc. An innovative loan product offered by some Sacco's. These loans are for just a couple of days to allow market women to purchase and sell items. Some Saccos also provide housing loans to members through KUSCCO Housing Fund and loans for solar panels, water tanks and bio

gas. Other services offered typically by Saccos with Fosas are sale of bankers' cheques. cheques cashing services. money transfer. safe-custody of documents. and pay points where members can receive their salary. pensions. or crop payments (Kodhek, 2001)

Every business decision considered must be profitable to the Sacco. before it can adopted. In this regard the study seeks to establish the causes of risk and specific steps Sacco managers taken to deal with the management of risk in Kenyan cooperative society most Sacco's offer only savings and credit services to members. The main investments products offered is non-withdrawable shares. These shares can only be withdrawn if a member leaves and often members have to wait six months to get their shares back. These shares generally received yearly interest on deposit and the members can usually get a loan at the ratio of 2-3 times the size of their shares. The loan products generally offered include development loans (for business or farming activities) emergency express loans, school fee loans and investment loan (with a term up to five years), (Kodhek, 2004).

According to Ackeman (2001), operation risk is a broad area that covers a range of risks related to operational errors. market events. lawsuits, and other sources of unexpected costs that do not fall into the category of credit risk and market risk losses. Sacco's should manage operational risk through internal controls these are policies and procedures to design to minimize and monitor operational risks in particular the risk fraud and management. Institution that mobilizes deposits must implement vigorous internal control and internal procedures because the unpredictable size and timing of cash deposit makes financial institutions vulnerable to fraud and errors.

According to Co-operative Bank of Kenya, (2008), transactions involving credit risk are key source of earnings. in line with its business strategy. In addition to assessments of individual credit risk assets, including loans. the Bank conducts comprehensive risk management from the perspective of its overall credit risk portfolio. In this way, the Bank seeks to generate earnings commensurate with its level of credit risk. Also, as a financial institution whose base consists of agricultural. forestry and fishery cooperatives, the Bank aims to promote these industries through "cooperative lending" while carrying out due risk management as a private financial institution according to information memorandum.

Liquidity risk. the risk that the Sacco will not have enough liquid asset to meet in the demand for cash outflows including savings withdrawals, loan disbursement and payment of operating expenses (Hassan, 2009).

1.1 Risk and Risk Management Practices by Saccos

The risks associated with the provision of banking services differ by the type of service rendered. For the Sacco's as a whole, however the risks can be broken into six generic types: systematic or market risk, credit risk, counterparty risk, liquidity risk, operational risk, and legal risks as follows: *Systematic risk* is the risk of asset value change associated with systematic factors. It is sometimes referred to as *market risk*, which is in fact a somewhat imprecise term (William, 2000). By its nature, this risk can be hedged, but cannot be diversified completely away. In fact, systematic risk can be thought of as undiversifiable risk; most investors assume this type of risk, whenever assets owned or claims issued can change in value as a result of broad economic factors. According to Hassan, (2009), the other kind of risk facing saccos is *credit risk* which arises from non-performance by a borrower. It may arise from either an inability or an unwillingness to

perform in the pre-committed contracted manner. This can affect the lender holding the loan contract. as well as other lenders to the creditor; therefore. the financial condition of the borrower as well as the current value of any underlying collateral is of considerable interest to its bank. Risk can also be viewed as *counterparty risk* which comes from non-performance of a trading partner. The non-performance may arise from counterparty's refusal to perform due to an adverse price movement caused by systematic factors. or from some other political or legal constraint that was not anticipated by the principals; diversification is the major tool for controlling nonsystematic counterparty risk (Escalante. 2001).

Delinquent loans are granted from member savings and if not paid as per the loan agreement. then members savings are at risk .Best practices requires that loans that are not paid as agreed are considered delinquent the day after the first missed payments. The entire outstanding loan balance is considered past due. SACCOs guarantee system of collateral makes management and the board of directors so complacent that even when a loan is not paid by the borrower. there is no need to mark it out as non performing loan as the guarantors are expected to pay up. However, this thinking ignores the impact of delinquent loans on cash flows, income, and also the likely hood of perpetuating indiscipline amongst borrowers according to WOCCU (2008).

Provisions for loan losses are the first line of defence to protect member's savings against identified risks of losses to the saccos. Its' prudent business practice in lending institution to recognize the probable loss from bad loans. Many saccos in different countries apply a tiered system of provision for delinquency. Its expected the propose SACCO Bill, will

provide prudential guidelines on loans provisioning in saccos according to WOCCU (2008).

Saccos taking deposits needs to have sufficient liquidity to meet the demand of saving withdrawals, loan disbursement and operational expenses. If the savers cannot access their cash as and when they need it then they will question the safety of their savings. If a sacco cannot provide a loan as when the members need one, then its falling on its duty to serve members. The current cooperatives rules require saccos operating front office services to maintain liquidity level of 10% of the savings deposit according to Odera (2008).

Capital adequacy is key indicator of financial stability of financial institution enabling a sacco to withstand losses from unforeseen problems. A portion of the saccos earning should be set aside in reserves used to cover losses from unforeseen or catastrophic problem. Since institutional capital is owned collectively by the membership with no individual direct claim on capital, these reserves allow the sacco to support high returns on savings, maintain low cost on loans, create additional reserves or invest in additional products and services according to Odera(2008)

According to Wateman, (2002), one of the major risk facing Saccos is l*iquidity risk* which can best be described as the risk of a funding crisis. While some would include the need to plan for growth and unexpected expansion of credit, the risk here is seen more correctly as the potential for a funding crisis. Such a situation would inevitably be associated with an unexpected event, such as a large charge off, loss of confidence, or a crisis of national proportion such as a currency crisis. In addition to liquidity risk, *operational risk* is associated with the problems of accurately processing, settling, and

taking or making delivery on trades in exchange for cash. It also arises in record keeping, processing system failures and compliance with various regulations. As such, individual operating problems are small probability events for well-run organizations but they expose a firm to outcomes that may be quite costly. Finally, Legal risks are endemic in financial contracting and are separate from the legal ramifications of credit, counterparty, and operational risks. New statutes, tax legislation, court opinions and regulations can put formerly well-established transactions into contention even when all parties have previously performed adequately and are fully able to perform in the future

1.2 Statement of the problem

Risk management is a central part of any organization's strategic management. It is the process whereby organizations methodically address the risks attaching to their activities with the goal of achieving sustained benefit within each activity and across the portfolio of all activities. The focus of good risk management is the identification and treatment of these risks. Its objective is to add maximum sustainable value to all the activities of the organization. It marshals the understanding of the potential upside and downside of all those factors which can affect the organization. It increases the probability of success, and reduces both the probability of failure and the uncertainty of achieving the organization's overall objectives according to Parker (1995).

Basic governance is weak; most Sacco's have weak social and sustainability objectives. Given that the profit motive is not predominant in most cases, boards of directors may often mis-interpret or not under-stand the significance of early indications of poor performance and may fail to act aggressively to rein in their managers. Ultimately they probably do not have the will or the capacity to bail out a failed institution. This kind of

risk is usually associated with the problems of accurately processing, settling, and taking or making delivery on trades in exchange for cash; it also arises in record keeping, processing system failures and compliance with various regulations.

Saccos experience high risk of rapid deterioration of portfolio quality, although loan delinquency at well-run Saccos may be lower than at commercial banks. it can increase rapidly when management deteriorates as per Woccu (2008). Management risk. as with financial institutions, lies at the heart of deterioration in portfolio quality. In Saccos, this management risk is complicated by weak governance structures that often fail to correct missteps: this is one area where very few studies have ever been carried out in the country

Since most microloans are unsecured, Saccos do not require formal collateral, and instead base loan decisions on character, group solidarity, and past repayment history. Collateral, when pledged, may not be legally registered or may have little liquidation value. Thus, when loan portfolio quality suffers substantially, Saccos then face greater loan losses relative to the amounts outstanding than intermediaries that operate other types of portfolios secured with collaterals (Johnson, 1994). Most Saccos registered in the country do not have good lending policy which regulates collaterals to prevent loan losses relative to the amount outstanding.

1.3 Objectives of the Study

1. The main objective of the study is to establish how risk management affects saccos in Kenya.
2. Establish the effects of risk management in saccos and find out the risk involve.
3. To investigate mechanism put in place for risk management control.

1.4 Importance of the study

The research investigates the business risk facing the Sacco in Nairobi province, the research takes on the local environment as the test ground Kenya has got expanding Sacco sector within co-operative and growing financial institutions sector that is sensitive to risk management.

1.4.1 Co-operative society

The findings of this research will be crucial in solving risk management issues in cooperatives society which for a very long period has not been managed within the concept of risk management. The result may help Sacco management to establish risk management policy programmes in saccos where non exist.

1.4.2 Investors (Members)

The research hopes to give confidence to the members whose funds are being managed by the management who a times lack the capacity in run the co-operatives societies or lack managerial skills required for the success of co-operative management. Member's satisfaction can be achieved; member who is satisfied with investment can be relied to support management.

1.4.3 Employees

Sacco will able to attract high quality human resources because risk management will guarantee high returns. This will increase employee's morale

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter represents relevant studies that were carried out in the study concerning risk management in savings and credit co-operative societies. It presents studies on defining of risks, types of risks and sources of risks, credit risks, liquidity risks, interest rate risk, market risk, operational risk, risk management, risk management process, risk measurement, empirical literature on risk management and theories on Portfolio, CAPM and APT, related studies and summary of literature review.

2.1 Definition of risks

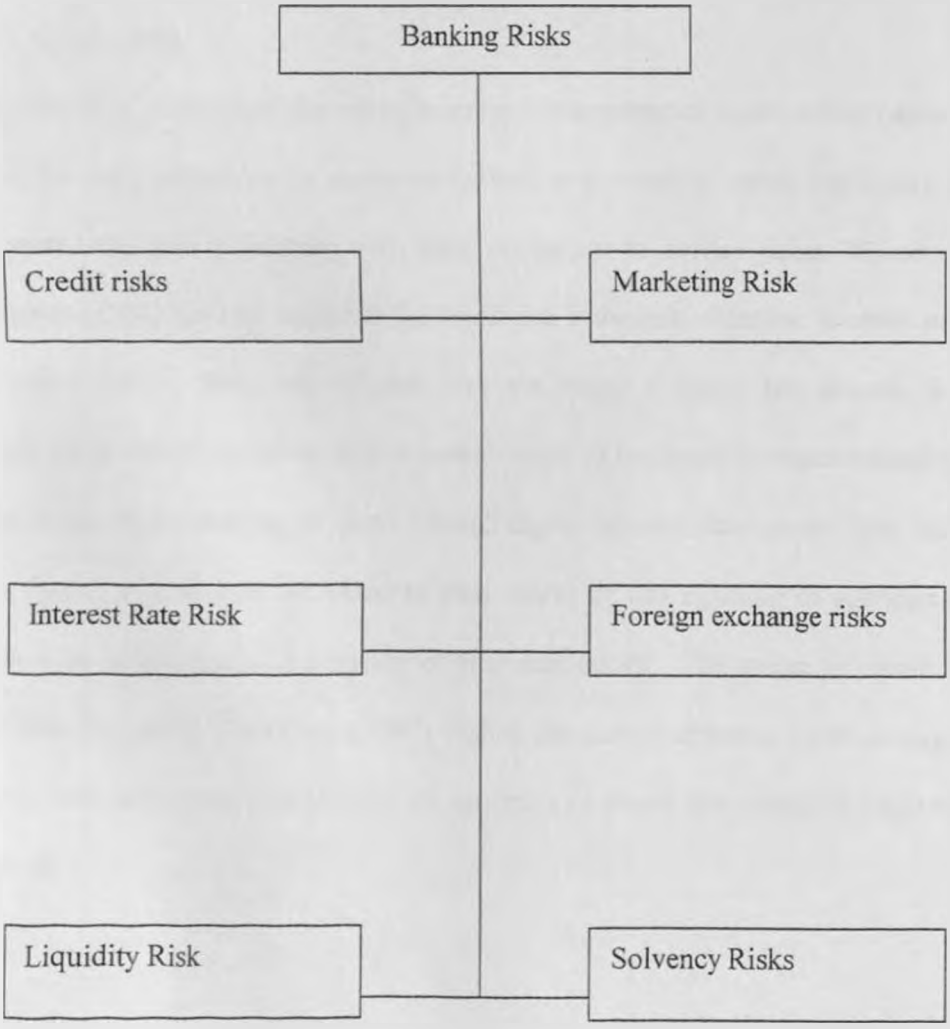
Different authors have defined risk in different ways. Risk is usually defined by the adverse impact on probability of several distinct sources of uncertainty Santomero (1995). Further risk is defined as the potential for loss by limiting an organization's ability to conduct its ongoing business or take advantage of opportunities to enhance its business. This is per the financial service round table, (1999). In general terms, people often think of risks as the chances of occurrence of bad incidents. Bad and chance are the two key elements of risk. In financial terms risk is the possibility of financial loss. Bad is the first element of risk and it refers to an event or outcome hat is adverse, such as operational failure. Bad also indicates a relative situation whereby losing more money is considered worse than losing less money. Chance is the second element as indicated by risk being involved with certainly that an adverse event may occur. This is per United States department of Agriculture USDA (2008). From the above definition risk can be identified

as the possibilities of loss that can materialize further risk is the factor that can jeopardize an organization's operation or undermine its financial conditions and capital adequacy.

2.2 Types of risks and sources of risks

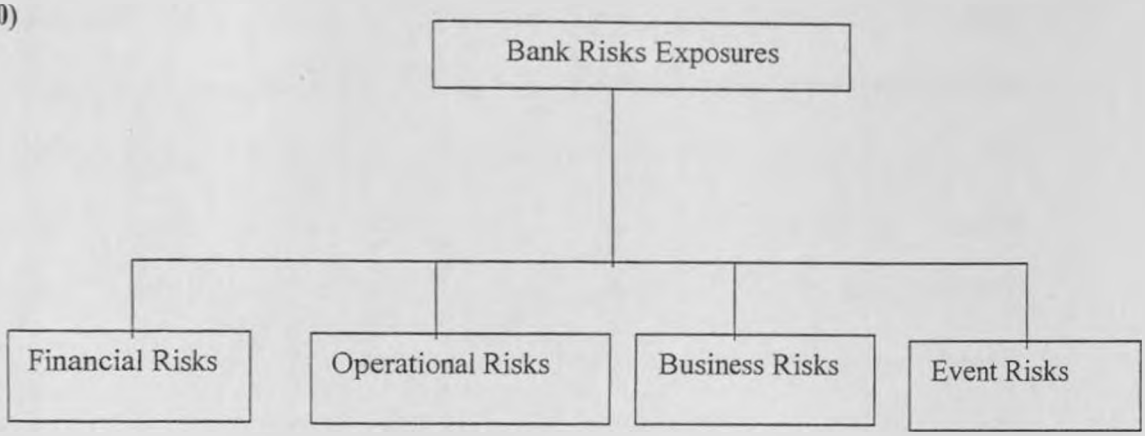
As a financial institution, cooperatives and credit societies are impacted to varying degree by risks depending on the size and nature of business Gardner and mills (1994). As stated by different authors and researchers, there are different types of risks for financial institutions or banks as summarized below by Bessis (1998).

Figure 1: classification of banking risks by Bessis (1998)



According to Greuning and Bratanovic (2000) banking risks can be classified into four types as shown in the figure 2

Figure 2 classification of banking risks exposures by Greuning and Bratanovia (2000)



2.2.1 Credit Risk

Credit risk is of paramount important in terms of the potential losses it may cause credit risk is the risks related to the customer default, as a result of credit risk arises due to customers who fail to comply with their obligation to service debts Wilson (1988) Troughton (1986) has also indicated that credit risk is the risk of decline in credit standing of counter party. Such deterioration does not imply deferent, but denotes that the probability of default increases capital markets value of the credit increases capital market value of the credit standing of firms through higher interest rates on the debt issues of these firms, or decline in the value of their shares or downgrading of agencies rating which is an assessment of the quality of their debt issues. The source of credit risks a rises from bad debt. Tourisitnai (1992) studied the factors affecting credit management and the performance and problems of the operation he found that source of credit risks is bad debts.

2.2.2 Liquidity risks

Liquidity risk stems from the failure to meet obligations when they are due because of the inability to convert assets into cash or to obtain sufficient funds to meet the cash needs with appropriate costs within limited time periods Kasikom bank (2003). In the micro finance sector cooperatives and credit savings societies handle the bulk of low and middle level income corners. Most members of these societies prefer to apply for short, medium and long term loans. For them to meet the demand for their customers, they need sophisticated assets and liability management skills, which depend on effective management information system and computerized operations. William (1999) mentioned that bad debt is a cause of liquidity risk. In addition, the significant losses, due to the default of customers can raise liquidity issues and doubts as to the future of the organization. Such doubts are sufficient to generate massive withdrawals of funds or the closing of credit lines by other institutions in order to protect themselves against a possible default. Extreme liquidity risk results in bankruptcy. Hence liquidity risk is a fatal risk. The liquidity risk arise form the mismatching between the sources of funds and the uses of funds.

2.2.3 Interest rate risk

Barton and David (1989) have described the interest rate risk as the risk earnings decline due to the movements of interest rates. Most of the balance sheet items of cooperatives which generate revenues and cost are indexed to interest rates. Since interest rates are unstable, so are earnings. Anyone who lends or borrows is subject interest rate risk. The lender earning available rate has the risk of seeing revenues reduced through a decline in interest rates. The borrower paying a variable rate has higher cost when interest rate increases. Both positions are at the risk since they generate revenues or costs indexed to

market rates. At the same time the movements of interest rates present opportunities for gains as well. Chiefly, the interest rate risk is affiliated to the interest rate in fluctuations in the financial market and affects the interest rates of cooperatives and credit savings societies that mobilize funds from financial institutions in contrast to the cooperatives that utilize funds form the cooperative members.

2.2.4 Market Risk

Gardener and Mill (1994) highlighted that market risk is the risk of adverse deviations of the cooperatives and credit savings or microfinance institutions from the current economic reality in terms of price costing. As a result market risk can be identified as the risk that emerges due to the uncertainty in relation with amount and the real economic pricing

2.2.5 Operational risk

Operational risk are related to the malfunctioning of the information systems, reporting system and the internal monitoring rules Madura (1996) operational risk is the latent risk affiliated to other risks that financial institutions incomplete in their business. It is the risk censed by external event and at the same time by deficiencies in internal processes, people and systems which result in an economic loss whether anticipated to some extent or totally unanticipated. Operational risks are too diverse to manage by an individual person or division. In the absence of efficient tracking and reporting of risks, some important risks can remain ignored, do not trigger any corrective action and can result in disastrous consequences operational risks appear at two different levels.

Technical level when the information system or the risk measures are deficient and the organizational level while related rules and policies are inadequate; in other words the risk that originates due to inadequate, in appropriate or in efficient monitoring, reporting and controlling measures in operation against the manifold risks affecting the institution is exposed to operational risk.

2.2.6 Risk Management

Various definitions of risks management have been derived based on the views of different researchers. Risk management is every thing that an organization does to reduce impacts in business operation to increase profitability and achieve goals of the organization according to Waterman (2002). Additionally risk management, in business context is about reducing the cost of risk, includes the cost of managing risk. Business including operation is about making profits or gain this is per USDA (2000).

The objective of risk management is the proper protection of company assets and profitability against loss form pure risk. Risk management is both a set of tools, techniques and a process that is required in implementing the strategy of organizations. According to Bessis (1998), the goal of risk management and asset and liability management is to optimize the risk reward trade off and to plan and fund the business development accordingly. Asset and liability management focuses on liquidity risk and interest rate risk at the level of balance sheet and hence a subset of risk management. Risk management does not only cover other types of risks such credit risk, market risk but also includes all the management processes, and the organization design required to implement efficiently the set of techniques and models which deal with risk measurement, this is per Thornhill (1990). Beaver and parker (1995) agreed that the

primary goal of risk management is to measure risk in order to monitor and control them. This capability serves several important functions. They include implementation strategy, development of competitive advantages, measure of capital adequacy and solvency, aid to decision making, reporting and control of risks, and management of portfolios of transactions.

Risk management is both a top down and a bottom up process; this is per Johnson (1994). At the top level targets earnings and risk limits are defined. From the top to bottom (top-down) the global goals are translated into signals to business units and so to managers in charge of transactions with customers. These signals include target revenues, risk limit and guidelines with respect to business unit policies. The monitoring and the reporting of risks are bottom –up oriented. starting with transactions and ending with consolidated risks. revenues and volumes of transactions. The aggregation is required for supervision purposes and to compare at all levels where decisions are made, objectives and realization hierarchy form top to bottom, in orders to turn global targets into business unit signals, and form bottom to top, to aggregate risks and profitability and monitor them.

2.2.7 Risk management process

According to Thietart (1979) risk mitigation process enables people and organizations to cope with uncertainly by taking steps to protect its vital assets and resources. The process provides a framework for identifying risks and making decisions about which types deserve immediate attention. He continues to argue that it's not a task to be completed and solved; it is a process that once understood should be integrated into all aspects of the reorganizations management, Trieschmann et al (2001) identifies five key steps involved in risk mitigation process

2.2.7.1 Establishing the context

It is important to begin risk mitigation program by setting goals and identifying a potential barriers as impediments to the implementation of the program. In the goal setting exercise, managers need to identify what they are trying to accomplish by integrating risk management into the organization operation some common goals for risk management efforts include; reducing injuries. avoiding cost claim preserving the firm's reputation in the community freeing up resources for mission critical activities and ensuring adequate risk financing.

2.2.7.2 Acknowledging and identifying potential risks exposures.

There are many ways to undertake risk identification: the key is using a framework or strategy that allows the firm to identify all major risk they are facing. To identify exposures to potential losses involves developing a complete list of loss exposures for the organization. Professional risk managers begin with a physical inspection and then use tools such as surveys, questionnaires and business flowcharts to identify potential loss exposures or business bottlenecks.

2.2.7.3 Evaluating and prioritizing risks

This step in the process helps the risk manager to keep things in prospective and establish a list of action items priority order.

2.2.7.4 Selecting appropriate risk management and implementing the plan

Once potential loss exposure have been identified and analyzed, professional risk managers evaluate industry accepted techniques for treating these exposures. These techniques include risk avoidance. retention. transfer and reduction professional risk: managers often apply a combination of two or more of the following techniques to address potential loss exposures. Avoidance: Whenever an organization cannot offer service while ensuring a high degree of safety. It should choose avoidance as a risk mitigation technique. It should not offer programs that pose too great risk. In some cases avoidance is the most appropriate techniques especially for infant firms because of their financial instability.

Reduction: This comprises techniques that are implemented with the intent to minimize the probability or frequency with which certain losses might occur. They ensure that adequate policies and procedures are put in place to ensure that risks ensures are contained or their securities are minimized

Retention: There are two ways to retain risks. The first is by design a firm may decide that other available techniques are not suitable and therefore retain the risk of harm or loss. This can be a rational and appropriate approach to managing risk. Where organizations get into trouble, risk tends to be retained unintentionally. The unintentional retention of risk can be as a result of failing to understand the exclusion of an insurance policy, insufficient understanding of the scope of risk an organization faces or simply because no one has taken the time to consider the risk and how it can be addressed. Risk transfer: This involves sharing risks with another organization through a contract. Two common examples are insurance contracts that require an insurer to pay for claim

expenses and losses under certain circumstances and services contracts whereby a provider agrees to perform a service and assume liability for potential horn accruing in the delivery of the service.

2.2.7.5 Monitoring and updating the risk management program

Risk management techniques and plans should be reviewed periodically to ensure that they remain the most appropriate strategy given the organization needs and circumstance. Once implemented. monitoring a risk mitigation program is an ongoing activity routine observation of the effectiveness of the program are imperative to determine whether progress is being made in addressing the exposures. Trieschmann (2001) concludes that if measurements prove more progress is required, modifications are called for to further enhance the program. Carnegic mellon university (2002) demonstrated that the process of risk management consist of the following phases as identifying analyzing, planning, tracking, and controlling an illustrate in this table:

Process of risk management

Function	Description
Identify	Search for and locate risks before they become problems
Analyze	Transform risk data into decision making information Evaluate impact, probability and time frame classify risk and prioritize risks
Plan	Translate risk information into decision mitigate action (both present and future implement those decisions
Track	Monitor risk indicators and mitigate action
Control	Correct deviation from the risk mitigation plan

2.2.8 Risk measurement

Barry and Robison (1989) measured business risk as the standard deviation of the rate of return to a portfolio of risky assets divided by the expected return on those assets. Escalante and Barry 2001 modified this definition to fit a corporate entity. They modelled business risk as the standard deviation of a company's return on assets divided by the expected value of return on assets. Their model is

$$BR = \frac{\sigma ROA}{\mu ROA} \qquad (2.1)$$

Where

Br = Business risk

σROA = Standard deviation of the return assets

μROA = Mean return on assets

For the managers, members and investors. quantifying their total exposure to business risk is a difficult task because there are so many sources of uncertainly and each is difficulty to measure (Olson, 1999), however, arriving at an accurate measure of business risk important. When making capital structuring decisions. Financial theory states that a business's optimal its business risk changes.

$$FR = \frac{\sigma ROA \left(^{A}/_{Eq}\right)}{\sigma ROA \left(^{A}/_{Eq}\right) - D \left(^{D}/_{Eq}\right)} \qquad (2.2)$$

Where

FR = Financial risk
A = Total Assets
Eq = Total equity
σROA = means return on assets
D = Fixed debt service payments

By multiplying business risk (equation (2.1) by financial risk (equation 2.2) Escalante and Barry (2001) arrive at a measure of total risk that is represented as;

$$\frac{\sigma ROE}{\mu ROE} = \frac{\sigma ROA\ (A/_{eq})}{\mu ROA\ (A/_{Eq}) - D\ (D/_{Eq})}$$

Where
TR = Total risk
σROE = Standard deviation of return on equity
μROE = Expected return on equity.

2.2.9 Empirical literature on risk management and related studies

According to AVI Figenbuam (1986) Dynamic and risk management perspective on Bowman is risk return paradox for strategic management. An empirical study found that. by using accounting measure of risk and return found that the paradox of Bowman hold in the 1970s but does not hold in the 1960s, they also found that the paradox disappears if market based risk measures are used. A according to Christians (2009) risk management in milk production. A study in five European countries in the UK using survey method found that the most important risks that dairy farmers currently perceive are various market risks followed by policy and production risks. The findings revealed that future oriented dairy farmers operate in a risk conscious but not risk a verse way and selectively applies risk management strategies.

Atakinson et al (1997), risk analysis and management in construction in the UK by survey method found risk management is essential to construction activities in minimizing losses and enhancing profitability. It was found that construction risk is generally perceived as events that influence project objectives of cost, time and quality. They found that risk management and analysis in this industry depend mainly on intuition, judgment and experience formal risk management and analysis techniques are rarely used due to lack of knowledge and to doubt of the suitability of these technologies for construction industry activities.

Sarasvathy (1998), perceiving and managing business risks; differences between entrepreneurs and bankers in the USA through a survey, cluster analysis and content analysis revealed that entrepreneurs accept risk as given and focus on controlling the outcomes at any given level of risk. they also frame their problem spaces with personal values and assume greater personal responsibility for the outcomes. Bankers focus on target outcomes attempting to control risk within structured problems spaces and avoiding situation where they risk higher levels of personal responsibility.

Lubka (2002), risk identification basic stage in risk management, in Japan found that risk identification is the basic stage in risk management. The importance of risk identification is determined by the necessity of knowing risks facing the organization. He concludes that risk identification is the base for correct future work of the organization with regards to developing and implementing new programmes for risk control. A according to Angle E. (1999), risk management of organization records in the UK using survey method found that for effective risk management of organizational records to be effective, It needs to be incorporated into decision making process of the organization making it central to all activities. He further says risk management of records needs to be proactive not reactive.

Roger (2006) quality and risk management what are the key issue? In the UK thorough a survey concluded that there three major risks predictable risks that organizations know they face. the risks which an organization knows is might run but which are caused by chance, and the risks which organizations do not know they are running. A according to Amron et al (2009) explored the availability of risk disclosures in the annual reports of Malaysia companies. The study was aimed to empirically test the characteristics of the

sampled companies. The findings of the research revealed that strategic risks came on top, followed by the operations and empowerment risks being disclosed by the selected companies in this study they used regression analysis.

According to Hassan (2009) risk management practices of Islamic Banks of Brunei Darussalam to asses the degree to which the Islamic banks in Brunei implemented risk management practices by using different techniques to deal with various kinds of risks. The study showed that like the conventional banking system Islamic banking was subjected to variety of risk due to unique range of offered products. The major risk that faced the Islamic bank was foreign exchange risk, credit risk and operating risk. In this study they used regression analysis which showed that risk identification and risk assessment analysis were the most influencing variables. Then they concluded that these variables to be keenly looked into by the Islamic banks.

According to Wenzhe et al (2007), Risk management in Chinese construction industry in china using regression analysis methodology and a survey; the study revealed that most project risks are commonly of concern to project participants. the industry has shifted from risk transfer to risk reduction. current risk management systems are inadequate to manage project risks and lack of joint risk management mechanisms is the key barrier to adequate risk management. A according to Manfredo, Richards and McDermott (2003) the agricultural cooperatives and risk management; impact on financial performance they found out that risks affect the overall performance and the financial system of agriculture cooperatives and induce the competitive disadvantage. A according to Polster and Huang (1999) analyzed risk and market risk of the financial sector in china. The finding

indicated the decrease in competencies of business operations of financial institutions due to the existence of risks.

Chaychon (2000) effect of credit risk and market risk in the operation of agricultural cooperatives in Northern Thailand found that credit risk is the source of liquidity risk. The research also found that change in prices lead to higher cost of operations. He concluded that credit risk and market risk bear adverse effect on profitability and competition of the agricultural cooperatives. A according to Krabuanrat (2002) risk management practices in Thai commercial banking business; the study found that bad debts as a source of credit risk, interest rate fluctuation as an original of interest rate risk and changes in foreign exchange rate as a cause of foreign exchange risk. A according to William (2000), risk in bank of agriculture and agricultural cooperatives in Thailand found that risk are responsible for the decrease in income. Also he found that banks have varying degrees by different risks e.g. credit risk, market risk, political risk etc.

2.3 Theories on Portfolio, CAPM and APT

The capital asset pricing model (CAPM) of William Sharpe (1964) and John Lintner (1965) marks the birth of asset pricing theory (resulting in a Nobel Prize for Sharpe in 1990). Four decades later, the CAPM is still widely used in applications, such as estimating the cost of capital for firms and evaluating the performance of managed portfolios. The CAPM builds on the model of portfolio choice developed by Harry Markowitz (1959). In Markowitz's model, an investor selects a portfolio at time t-1 that produces a stochastic return at t. The model assumes investors are risk averse and, when choosing among portfolios, they care only about the mean and variance of their one-period investment return. The portfolio model provides an algebraic condition on asset

weights in mean-variance efficient portfolios. The CAPM turns this algebraic statement into a testable prediction about the relation between risk and expected return by identifying a portfolio that must be efficient if asset prices are to clear the market of all assets. Sharpe (1964) and Lintner (1965) add two key assumptions to the Markowitz model to identify a portfolio that must be mean-variance-efficient. The first assumption is complete *agreement*: given market clearing asset prices at t-1, investors agree on the joint distribution of asset returns from t-1 to t. And this distribution is the true one, that is, the distribution from which the returns we use to test the model are drawn. The second assumption is that there is *borrowing and lending at a risk free rate*, which is the same for all investors and does not depend on the amount borrowed or lent.

The Arbitrage Pricing Theory (APT) was developed primarily by Ross (1976a, 1976b). It is a one-period model in which every investor believes that the stochastic properties of returns of capital assets are consistent with a factor structure. Ross argues that if equilibrium prices offer no arbitrage opportunities over static portfolios of the assets, then the expected returns on the assets are approximately linearly related to the factor loadings. (The factor loadings, or betas, are proportional to the returns' covariances with the factors.) Ross' (1976a) heuristic argument for the theory is based on the preclusion of arbitrage. Ross' formal proof shows that the linear pricing relation is a necessary condition for equilibrium in a market where agents maximize certain types of utility. The subsequent work, which is surveyed below, derives either from the assumption of the preclusion of arbitrage or the equilibrium of utility-maximization. A linear relation between the expected returns and the betas is tantamount to an identification of the stochastic discount factor (SDF) according to Huberman(2005).

Summary of Literature Review

As per financial theory. Sacco's can increase their value by reducing the probability of risk. which in term may be achieved by managing credit risk, liquidity. risk. interest rate risk market risk operational risk through the use of risk management techniques. Empirical research has also confirmed that firms use risk management techniques to enhance their value. A number of potential explanation have been developed by amongst others Froot et al (1993) Fok at el (1997) Smith and Stultz (1985) Smith (1995) and Stultz (1996) to explain why firms might risk to manage risk. Sarasvalthy (1998) perceiving and managing business risk Lubka T. (2002) risk identification basic stage in risk management, Richard and Mc Dermott (2003) found out that risk affects the overall performance and the financial systems. Theoretically, the Sacco's should assume risk where expected returns exceed required returns and keep the total risk under check. The financial literature also recommends focusing on the value of the company. In practice management objectives will largely determine its decision about specific risk management techniques.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter was set to explain the research design, population of interest sources of data and techniques that well be used in data analysis.

3.2 Research design

The type of research design used in the study was exploratory. This was mainly because the focus of research study was to gain the understanding, insight and familiarity of how the role of risk affects the saccos. Similar studies that have successfully used this research design includes Smith (1988) and Beatty and Gron (2001).

3.3 The population

The population of this study comprised of two hundred and nine (209) saccos operating front office services in Kenya. The major variable in this study was derived from financial statements information specifically relating to risk, liquidity, capital adequacy and loan portfolio over the period of this study.

3.4 The Sample

The sample size of forty three Sacco's is a representative of the population due to homogeneity of activities in the sacco sub sector. The research was used probabilistic sampling method because it was perceived to be more statistically efficient than non-probabilistic ones given that it attempts to minimize subjectivity in the selection of elements.

The sample respondents were selected using random sampling method where the target are classified population from all Sacco's into strata. During sampling, systematic method will be used to ensure well spread sample and fair distribution.

3.5 Study setting

Since Nairobi province has forty three (43) saccos out of the Two hundred and nine (209) operating front office saving accounts and due to the homogeneity of the services being offered and risk inherent in saccos, therefore this gives the justification of the choice of Nairobi province for this study.

3.6 Data collection

The data was collected through secondary data and primary data. During the study, the secondary data was collected from the available sources which include books on macro economics, research paper and journals on Kenya and other developing economies. Monthly economic review and annual economic report from the central bank of Kenya, economic survey national development plan and statistical abstract from bureau of statistic that also provides major economic indicators and World Bank report on the developing economies and Ministry of Cooperative and Marketing Development. The primary data will be collected through oral interviews and structured questionnaires. The interview were conducted from 43 saccos and the target responds are accountants or finance managers.

3.7 Data Reliability and Validity

Since the researcher intends to collect primary data, the basic approach in this study to validity of tests and measure would be content validity. This approach measures the

degree to which the tests items represent the domains being measured. The researcher identified the overall content to be represented. Items were randomly chosen from the content area. Reliability of the test instruments was estimated by examining the consistency of the responses between the tests.

3.8 Data analysis

After editing and sorting out the questionnaires for completeness, returns, and coding analysis of the data was done. The quantitative data analysis, descriptive statistics was used to analyze the data to give the percentages (percent), frequencies (f) and means. Data was presented in form of tables and charts which helped to explain the relationship between the variables of study. Qualitative data analysis was carried on qualitative data from the open ended questions. Computer software, Statistical Package for Social Sciences (SPSS) was used.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents a description of analysis of data, presentation, interpretation and discussions. The study was on a survey of risk management practices by Saccos in Kenya. The work is organised based on the four research questions raised for the study. Data is then presented in form of frequency tables and charts where applicable. This presentation is based on the questionnaires administered.

4.2 Questionnaire Return Rate

Completion rate is the proportion of the sample that participated as intended in all the research procedures. The returned questionnaires were from 30 from Saccos from within Nairobi. Analysis and data interpretation was based on these returns.

Table 4.1: Return Rate

Return rate	**Number**	**% of total**
Returned questionnaires	30	69.8
Spoilt	13	30.2
Total issued questionnaires	**43**	**100.0**

Source: Survey, 2010

From table 4.1 69.8% of the respondents returned the questionnaires while 30.21% were spoilt. Mulusa (1990) stated that 50 percent return rate was adequate. 60 percent good and 70 percent very good. The return rate was hence considered good to provide required information for the purpose of data analysis.

4.3 Background information

This section presents the characteristics of the organization in terms of geographical spread of the organization within the country, availability of a corporate plan, time span in years that a plan covers, availability of risk management department, number of employees, and description of senior management staff in the organizations.

Table 4.2: The geographical spread of the organization within the country

Geographical spread	Frequency	Percent
Only in Nairobi	18	60.0
In every Province	12	40.0
Total	**30**	**100.0**

Source: Survey, 2010

Majority of the Saccos (60%) are situated only in Nairobi and 40% of them were in every province in the country.

Corporate plan

All the respondents indicated that the organizations had a corporate plan. With that in mind the researcher then sought to know the time span in years the plan covered. The results are as shown in Table 4.3.

Table 4.3 Time span in years the a plan covers

Time in years	Frequency	Percent
3 year	1	3.3
4 years	2	6.7
5 years	25	83.3
More than 5 years	2	6.7
Total	**30**	**100.0**

Source: Survey, 2010

Majority of the organizations (83.3%) had a time span of 5years while 6.7% of them had 4years and more than 5 years respectively and only 3.3% of them who had a time space of 3 years of the corporate plan.

Risk Management Department

The researcher then sought to know whether the organization had established risk management department in their organization. The results are as shown in table 4.4.

Table 4.4: Availability Risk management department

	Frequency	Percent
Yes	11	36.7
No	19	63.3
Total	**30**	**100.0**

Source: Survey, 2010

Majority of the organizations (63.3%) of them had no risk management department and 36.7% of them had risk management department.

Number of Employees

There was a need to know the number of employees the organization had. This would help to know how efficient an organization was. The results are as shown in table 4.5.

Table 4.5: Number of employees in the organization

	Frequency	Percent
Less 50	22	73.3
50-100	3	10.0
100-500	5	16.7
Total	**30**	**100.0**

Source: Survey, 2010

From table 4.5, it is clear that majority of the organization (73.3%) had less than 50 employees in the organization while 16.7% of them had 100-500 employees and 10.0% of them had 50-100 employees in their organizations respectively.

The respondents were asked to describe the caliber of the senior management staff in their organization. The results are as shown in table 4.6.

Table 4.6: A statement describing the senior management staff in the organization

	Frequency	Percent
Technical specialist with no management training	2	6.7
Technical specialist with management training	4	13.3
Professional management with business and management training	22	73.3
Technical specialist with management training and professional management with business and management training	2	6.7
Total	**30**	**100.0**

Source: Survey, 2010

The data revealed that the majority (73.3%) of the senior management staff were professional management with business and management training while 13.3% of them had technical specialists with management training and 6.7% of them had both technical specialist training in management and professional management in business and management training; and technical specialists with no management training in their organization respectively.

Establishing how risk management affects saccos in Kenya.

Risk management is every thing that an organization does to reduce impacts in business operation to increase profitability and achieve goals of the organization. There are different factors that affect risk management hence the researcher wanted to know whether the organizations had approved risk management policy that would guide the organization.

Table 4.7 Approved Risk Management Policies

	Frequency	**Percent**
Yes	13	43.3
No	17	56.7
Total	**30**	**100.0**

Source: Survey, 2010

Slightly above half of the respondents (56.7%) indicated that their organization had not approved risk management policy and only 43.3% of them had approved risk management policy.

The respondents were asked then to indicate who provided the final approval of organization's risk management policy. Majority (72.0%) of those who had indicated that their organization had an approved risk management policy indicated that it was approved by audit committee and 28.0% of them indicated that it was approved by the credit committee.

The respondents were asked to indicate whether the risk management policy has defined the organization objectives and tolerance for risk clearly. The results are as shown in table 4.8.

Table 4.8: Organization objective and tolerance for risk been clearly specified in the risk management policy

	Frequency	Percent
Yes	13	43.3
No	17	56.6
Total	**30**	**100.0**

Source: Survey, 2010

Most of the respondents (43.3%) indicated that their organization objective and tolerance for risk been clearly specified in the risk management policy. With this in mind the researcher then wanted to know whether the organization's risk management policy based on comprehensive profile of business risk was likely to impact on the business in the next coming years. The results are as shown in table 4.9.

Table 4.9: Organization risk management policy based on comprehensive profile of business risks likely to impact business in the next coming year

	Frequency	Percent
Yes	18	60.0
No	12	40.0
Total	**30**	**100.0**

Source: Survey, 2010

The majority of the respondents (60%) indicated that the organization risk management policy was based on comprehensive profile of business risk likely to impact business in the next coming years.

Table 4.10: Organization's Current Risk Management ways Work Well

	Frequency	Percent
Yes	21	70.0
No	9	30.0
Total	**30**	**100.0**

Source: Survey, 2010

Majority of the respondents (70.0%) indicated that the current risk management ways in their organization worked well while 30% indicated it did not work well. The researcher then wished to know how effective risk management in their organization was. The results are as shown in table 4.11.

Table 4.11: How Effective risk management is in the organization

	Frequency	Percent
Critical	11	36.7
Very Important	17	56.7
Marginally important	2	6.7
Total	**30**	**100.0**

Source: Survey, 2010

Majority of the respondents (94.3%) indicated that the risk management in their organization was important and 6.7% of them felt it was marginally important.

Establish the effects of risk management in saccos and find out the risk involve.

The effect of risk management is either negative or positive that is it can either be profitability increase or incurring of losses. Hence risk management is both a set of tools, techniques and a process that are required in implementing the strategy of organizations. In this study the researcher discussed the risk structure: that is risk committees, the types of risks and risk management systems put in place.

Risk Structure

The researcher asked the respondents to indicate who took overall responsibility for risk process in the organization. The results are as shown in table below.

Table 4.12: Overall responsibility for risk management process in the organization

	Frequency	Percent
Credit committee	6	20.0
Audit committee	13	43.3
Board of directors (CMC)	2	6.7
Audit Committee and Audit Department	2	6.7
Supervisory committee	2	6.7
Manager	3	10.0
Credit committee and finance manager	2	6.7
Total	**30**	**100.0**

Source: Survey, 2010

Most of the respondents (43.3%) felt that the audit committee took overall responsibility for risk management process in the organization. while 20.0% felt the credit committee did, another 10.0% felt that the manager did and 6.7% felt that the board of directors. audit committee and audit department; supervisory committee and credit committee and finance manager took the overall responsibility for risk management process in the organization. This shows that although there are different committees that took responsibility for risk management in the organizations but the most preferred was audit committee.

Table 4.13: The Organization has implemented the following risk committees

	Frequency	Percent
Credit and Supervisory Committee	9	30.0
Risk committee board	7	23.3
Executive risk management committee	6	20.0
CMC in charge of risk management	2	6.7
Supervisory committee	3	10.0
Risk committee board, Executive risk management, risk steering	2	6.7
Audit / Fosa Committee	1	3.3
Total	**30**	**100.0**

Source: Survey, 2010

In most of the organization the committee that were responsible for the implementation of the risk committee included credit and supervisory committee with 30% of the respondents, 23.3% indicated that it was done by risk committee board. while 20.0% felt it should be done by executive risk management committee, another 10.0% felt it should be done by supervisory committee, 6.7% by the CMC in charge of risk management and risk committee board, executive risk management and risk steering committee respectively found in their organization and only 3.3% of them who felt that it should be done by audit/fosa committee. The researcher observes that in all the organizations where implementation was done there was a committee that was charged in taking responsibility of the implementation of the same.

The researcher then wished to know whether the organization had established a risk committee in its combined with the board of audit or supervisory committee. The

respondents felt that in most cases there lack a risk committee hence the supervisory committee and staff members were charged with the responsibility of same in the organization.

The research then wished to establish members of risk committee. The results are a shown in the table below.

Table 4.13: Members of the risk committee

	Frequency	**Percent**
Committee members	6	20.0
Supervisory and Committee Members	7	23.3
Management committee and supervisory committee	2	6.7
Committee members and management staff	4	13.3
Supervisory committee	4	13.3
No Response	7	23.3
Total	**30**	**100.0**

Source: Survey, 2010

About 23.3% of the respondents said it comprised of supervisory and committee members while 20.0% said it comprised of committee members alone while 13.3% of them said it comprised of committee members and management staff; and supervisory committee and 6.7% said it comprised of management committee and supervisory committee. Hence there was need to include other members in the risk committee.

When asked to indicate the person who chaired the risk committee 20.0% of them said there was supervisory committee chair, 16.7% of them were read by the management

committee chair, 13.3% of them were chaired by the treasurer and chairman of supervisory committee respectively while 3.3% of them were chaired by the vice-chairman.

The members were asked to indicate how often the risk committee meets to review the risk profile, risk mitigation and risk tolerance in their respective organizations. The results are as shown in the below.

Table 4.14: Frequency of risk committee meeting to review the risk profile, mitigation and tolerance in the organization

	Frequency	Percent
Monthly	11	36.7
Quarterly	7	23.3
Annually	3	10.0
No meetings yet	2	6.7
No Response	7	23.3
Total	**30**	**100.0**

Source: Survey, 2010

About 36.7% of the respondents said the committee meet monthly for review, while 23.3% of them meet quarterly, 10.0% of them annually and 6.7% of them indicated that there was no meetings yet for the review of risk profile, risk mitigation and risk tolerance in their respective organizations. The researcher recommends that there is need to have regular meetings to review the risk profile, mitigation and tolerance of the organizations.

On the responsibilities of the risk committee respondents were asked to pick a statement that best described this. The results are as shown in the table below.

Table 4.15: Statements in relation to responsibilities of the risk committee

Statement	Frequency	Percent
Defined and documented	10	33.3
Not defined clearly	14	43.4
Have been documented and not defined	2	6.7
Risk committee does not exist	2	6.7
No Response	3	10.0
Total	**30**	**100.0**

Source: Survey, 2010

Of the total respondents 43.4% of them felt that the risk committee responsibilities were not defined clearly. While 33.3% of them felt that the risk committee responsibilities were defined and documented in their organizations and only 6.7% who felt that the responsibilities were documented and were not defined and risk committed did not exist respectively.

The researcher then wanted to find out the usage of risk management systems or processes. The results are as shown below.

Table 4.16: Usage of risk management systems or processes

	Frequency	Percent
Regular reporting of activities and incidents to committee	2	6.7
Business unit risk assessments	1	3.3
Compliance audit functions	2	6.7
Internal audit functions	6	20.0
Integrated risk management systems	3	10.0
Regular reporting of activities and incidents; business unit risk assessments, compliance audit functions, internal audit functions, and integrated risk management systems	13	53.3
Total	**30**	**100.0**

Source: Survey, 2010

Slightly about half of the respondents (53.3%) felt that there were regular reporting of activities and incidents, business unit risk assessments. compliance audit functions, internal audit functions and intergrated risk management systems were used to in risk management systems or processes in the organization while 20.0% indicated the use of internal audit functions. with 10.0% of them indicating integrated risk management systems, and 6.7% of them said use of regular reporting of activities and incidents to committees, and compliance audit functions as in use in their respective organizations. Hence it is clear that all organizations used different risk management systems or processes.

The researcher then wanted to establish the lines for reporting when internal audit function plays a role in the risk management activities in the organizations. The results are as shown below.

Table 4.17: Role played by the internal audit function in the risk management activities of the organization, and the reporting lines

	Frequency	Percent
Audit committee	9	30.0
Management committee	12	40.0
Supervisory committee	6	20.0
Audit and supervisory committee	3	10.0
Total	**30**	**100.0**

Source: Survey, 2010

Most of the respondents (40.0%) indicated that when internal audit function played a role in risk management then management committee was the first in line for their to report the findings, while 30.0% reported to the audit committee, 20% reported to the supervisory committee and 10% reported to both the audit and supervisory committee. The researcher observes that there is a protocol in all that is done in the organizations especially where risk management plans have been put in place.

To investigate mechanism put in place for risk management control.

Risk control has a wider ambit than risk management. Risk control is the entire process of policies, procedures and systems an institution needs to manage prudently all the risks resulting from its financial transactions, and to ensure that they are within the bank's risk appetite. Hence the researcher wished to establish the risk/return analysis to help determine the risk tolerance and objectives of the organization. The results are as shown in the table below.

Table 4.18: Organization a risk / return analysis helps determine the risk tolerance and objectives

	Frequency	Percent
Yes	22	73.3
No	8	26.7
Total	**30**	**100.0**

Source: Survey, 2010

Majority of the respondents (73.3%) felt that their organization had a risk/return analysis to help determine the risk tolerance and objectives while 26.7% of them did not. The researcher then wished to know how often this was done. Most of the respondents (43.3%) indicate that the organization perform risk/ return analysis once every month. while 30.0% of them did it quarterly and 23.3% of them did it annually. It is only one organization where the responsibility was done three years ago. The researcher observes that most organization in the study carried out risk management analysis at least once monthly. This would protect the organization from getting itself into some problems in the future.

The researcher then asked the respondents to indicate whether the organization formally evaluated the effectiveness of existing risk management controls and cost of controls. The results are as shown below.

Table 4.19: Organization formally evaluates the effectiveness of existing risk management controls and cost of controls

	Frequency	Percent
Yes	22	73.3
No	8	26.7
Total	**30**	**100.0**

Source: Survey, 2010

Majority of the respondents 73.3% felt that their organization formally evaluate the effectiveness of the existing risk management controls and cost of controls and only 26.7% who said that they did not.

Having established that the organization carried out evaluation on effectiveness of existing risk management controls and cost of controls. the researcher then wanted to establish the level of organization reliance upon each of the applicable validation processes. The results are as shown below.

Table 4.20: Reliance of validation process

Validation Method	High	Medium	Low
External audit	23 (76.6%)	6 (20.0%)	1 (3.3%)
Internal audit	20 (67.7%)	9 (30.0%)	1(3.3%)
Regulatory compliance certification	14 (46.7%)	6 (20.0%)	10 (33.3%)
Independent quality audits	13 (43.3%)	5 (16.7%)	12 (40.0%)
Risk management reviews	10 (33.3%)	16 (53.3%)	4 (13.3%)
Control risk self assessment	10 (26.6%)	13(43.3%)	9 (30.0%)
Consultant reviews	6(20.0%)	4(13.3%)	20 (66.7%)

Source: Survey, 2010

The highest rated validation method was external audit with 76.6% of the respondents while 67.7% of the respondents rated highest internal audit, 46.7% of them rated high regulatory compliance certificate. 43.3% of them rated high independent quality audits. another 33.3% of them rated risk management reviews high. 26.6% of them rated control risk self assessment high and 20% rated least consultant reviews. The researcher observes that majority of the respondents believed in external audit as reliant validation process in the organizations. This shows there was confidence with the work done by external auditors.

Risk Portfolio

The researcher the wished to know how satisfactory the respondents with the level of credit management in the organization were. The results are as shown in the below.

4.21: Satisfaction with the level of credit management in the organization

	Frequency	Percent
Excellent	2	6.7
Satisfactory	17	56.7
Good	10	33.3
Unsatisfactory	1	3.3
Total	**30**	**100.0**

Source: Survey, 2010

Slightly above half of the respondents (56.7%) were satisfied with level of credit management in the organization while 33.3% felt it was good, 6.7% indicated it was excellent and only 3.3% of them who were unsatisfied with the credit management in the

organization. The researcher observes that in majority of the organizations in the study credit to its members was managed satisfactory. This shows that even members of these organizations do not complain since they are satisfied with the management of their credit facilities availed to them.

The researcher wished to identify the criteria the organization used to assess the impact of its risks. The results are as shown below.

Table 4.22: Criteria used by the organizations to assess the impact of its risks

	Frequency	Percent
Financial	13	43.3
Regulatory / compliance	4	13.3
Financial, Regulatory, compliance	13	43.3
Total	**30**	**100.0**

Source: Survey, 2010

Most of the respondents (43.3%) indicated that the financial and finance, regulatory and compliance was some of the criteria used by the organization to assess the impact of its risks and 13.3% of them said regulatory and compliance was another factor for assessing the impact of its risks.

The researcher then wanted to establish if the organization used any technology tools or software to drive the risk management process in the organization.

Table 4.23: Organization used technology tools or software to drive the risk management process

	Frequency	Percent
Yes	15	50.0
No	15	50.0
Total	**30**	**100.0**

Source: Survey, 2010

Half of the respondents indicated that the organization used technology tools and software to drive the risk management process while the other half indicated that they did not use any technology/ software.

Measuring and Monitoring risks

Monitoring a risk is an ongoing routine activity, observation of the effectiveness of the program is imperative to determine whether progress is being made in addressing the exposures. Trieschmann (2001) concludes that if measurements prove more progress is required, modifications are called for to further enhance the program. Hence the researchers sought to identify the methods used by the organization in measuring and monitoring risk.

Table 4.24: Methods used by the organization in measuring and monitoring risk

	Frequency	Percent
Internal audit used to monitor performance of your risk program	13	43.3
Key risk indicators are used to measure risk management process	3	10.0
Risk committee for independent oversight	2	6.7
Internal audit for monitoring performance and key risk indicators are used to measure risk management process	12	40.0
Total	**30**	**100.0**

Source: Survey, 2010

Most of the respondents (43.3%) felt that the organization used internal audit to monitor performance of their organization, while 40% of them felt that they used both internal audit and key risk indicators to measure risk management process. Another 10.0% of the respondents felt that key risk indicators are used to measure risk management process and 6.7% of them felt that risk committee for independent oversight was used to measure and monitor risk in their organization. The researcher then asked the respondents to indicate how often the internal audit was used to monitor the performance of risk management program in their organization. Majority of the respondents (80.0%) indicated that it was done monthly, while 13.3% of them said it was done annually and 6.7% of them said it was done quarterly.

The researcher enquired on the methods used by the organization to report risk. The results are as shown in the table below.

4.25: Methods used to report risk in the organizations

	Frequency	Percent
Annual report	20	66.7
Not reported	4	13.3
Annual and quarterly reports	6	20.0
Total	**30**	**100.0**

Source: Survey, 2010

Majority of the respondents (66.7%) indicated that the organization used annual report while 20.0% of them indicated that their organization used annual and quarterly reports. Only 13.3% who said that it was not reported. The researcher observed that there should be a regulator within the organization where risk is reported regularly so as to avoid future occurrences.

The researcher then asked the respondents to indicate whether their organizations used annual reports on risk management activities and to indicate the risk management information that is included in it.

Table 4.26: Organization uses annual report to report risk management activities and the risk management information is included in them

	Frequency	Percent
A description of the risk faced by the organization	24	80.0
A description of risk management approach by the organization	4	13.3
A risk management declaration by the management committee	2	6.7
Total	**30**	**100.0**

Source: Survey, 2010

Majority of the respondents (80.0%) indicated that the organization used annual reports to report the description of risk faced by the organizations while 13.3% said the organization used description of risk management approach and 6.7% used risk management declaration by the management committee.

Challenges faced in risk management in the organization

The respondents were asked to highlight the challenges they faced in risk management in their organizations. Majority of them indicated cash flow/ liquidity problems within the organizations. Others said technological challenges, which included qualified personnel on IT departments; there was also lack of enough manpower and high turnover of employees. Another challenge was lack of proper internal controls and information deficits. Others felt that mismanagement was a factor, loan loss due to failure loanee to repay their loans and serious lack of management policies to guide the organization.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study and the conclusions drawn from the findings of the study. Finally recommendations made from findings and suggestions for further research are presented.

5.2 Summary

On establishing how risk management affects saccos in Kenya, the study was guided by different questions, which include approved risk management policies where slightly above half of the respondents (56.7%) had not approved risk management policy. On the approval of risk management policy, majority of the respondents (72%) said that their organization had an approved risk management policy and was approved by the audit committee. The other question was organization objective and tolerance for risk been clearly specified in the risk management policy, with 43.3% of the respondents saying that it had been clearly specified in the risk management policy. Another question was organization risk management policy based on comprehensive profile of business risks likely to impact business in the next coming years. 60% indicated that the organization risk management policy was based on comprehensive profile of business risk likely to impact business in the next coming years. 70% of the respondents said that the current risk management ways in their organization worked well. When asked how effective the risk management was in the organization, 94.3% of them said it was important hence very effective.

To establish the effect of risk management in saccos and find out the risk involve. 43.3% of the respondents indicated that the overall responsibility for risk management process in the organization was on the audit committee. The respondents indicated that the organization had implemented credit and supervisory committee as the steering committee on risk management. While in other organizations the risk committee lack but the supervisory committee and staff members were charged with the responsibility. In most organization (43.3%) the members of the risk committee comprised of the committee members and supervisory committee and most were chaired by the supervisory committee chairman. On how often the risk committee met to review the risk profile. mitigation and tolerance in the organization, majority (60%) indicated it was done monthly and quarterly. On the responsibilities of the risk committee most respondents (43.4%) felt that it was not defined clearly. Slightly above half of the respondents (53.3%) felt that there were regular report of activities and incidents, business unit risk assessments, compliance audit functions. internal audit functions and integrated risk management systems. On the role played by the internal audit function in the risk management activities of the organization and the reported to the risk management then management committee was the first in the line of their reporting of the findings.

To investigate the mechanisms put in place for risk management control. There were several factors that were discussed. which included the organization risk/ return analyses helps determine the risk tolerance and objectives with majority (73.3%) of the respondents agreeing with this. Most of the respondents (43.3% also indicated that the returns were done in monthly periods and 30% of them quarterly. On the evaluation of the effectiveness of existing risk management controls and cost of controls majority (73.3%) felt that it was effective hence minimising the risk. On the reliance of validation

process. external audit was rated highest by 76.6% of the respondents. This is because it is the most popular method used in most saccos. On risk portfolio majority (96.7%) of the respondents indicated satisfaction of the credit management in their organisations. The common criteria used by the organization to assess the impact of its risk was through financial and finance regulatory and compliance. On the technological tools used to drive risk management process in the organization. half of the respondents felt that the tools and software put in place were fine and half felt there was much more to be done to prevent risks.

On measuring and monitoring risks, the methods used by the organization in measuring and monitoring risk were mentioned and 83.3% of the respondents felt that internal audit used to monitor performance of the risk program and key risk indicators were used to measure risk management process in their organization.

On the methods used by the organization to report risk 86.7% of the respondents felt that annual report was the most common methods and also quarterly reports. On the use of annual report on risk management activities and the risk management information that was included in it, majority of the respondents (80%) felt that a description of the risk faced by the organization was given in the annual report.

On the challenges faced in risk management in the organization. the most common were cash flow/ liquidity, qualified personnel. on IT departments, lack of enough manpower and high turnover of the employees. Other included lack of proper internal controls and information deficits.

5.3 Conclusions

The following conclusions can be drawn from the study.

That each Sacco should put in place risk management policies to guide it in preventing risk.

- A strong audit committee should be put in place so as to help detect when such risk are affecting the running of the organization.
- All the organization should be confident about the measures they have put in place to prevent risk for the coming years especially in their risk management policy.
- Although the risk management policy has been put place in some organization there is need to have other ways to detect when problems are arising within the organization that would put them out of business.
- The credit and supervisory committee should work hand in hand to reviews the risk profile, mitigation and tolerance in the organization.
- This should be done often either monthly as the most appropriate.
- There should be a risk committee put in place in all the organizations.
- The responsibility of the risk committee should be defined, documented and implemented to prevent other risk activities.
- Several mechanisms should be put in place to prevent risk in the organization. This should be through risk/ return analysis which is done regularly to help determine the risk tolerance and objectives of the organizations.
- External audit should be encouraged in all the sacco to help in detecting risks.
- Organization should have other methods other than financial to assess the impact of the risk.
- There should tool and software to measuring and monitor risky ventures the organization is about to encounter.

- Although annual reports are commonly used to detect risky ventures in the organization other reports should also be put into consideration especially by the internal auditors in order to prevent losses in the organizations.
- The organization should be able to raise their liquidity without problems from its members, so as to run their projects smoothly, hence they should encourage their members to save, borrow loans and repay their loans in time so as to make more profits from the projects intended to be carried out.
- Enough manpower should be put in place and should have qualified personnel especially IT department.

5.4 Recommendations

- There is need for all organization to have a risk management policy (ies) guiding them.
- There is need for an audit committee that help in advising the management before venturing into risk ventures
- Credit committee and supervisory committee should be more active in preventing risks
- Other mechanisms should be put in place so as to help the organizations prevent major risks that would pull down the organizations.
- Other than annual report there should be other reports to guide the organizations
- Saccos should be encouraged to employ qualified personnel

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APPENDIX I: QUESTIONNAIRE

Part A: Background Information

1. What is the name of your organization? _____

_____

2. What is the nature of operation of your organization? _____

_____

In the following set of questions tick the box that best applies to your organization?

3. What is the geographical spread of your organization within the country?

☐ Only in Nairobi

☐ In every Province

☐ Others please specify_____

4. Does your organization have a corporate plan?

☐ No ☐ Don't know ☐ yes

5. If yes what time span in years does a plan cover?

☐ 1 year ☐ 2 years ☐ 3 years ☐ 4 years

☐ 5 years ☐ more than 5 years don't know

6. Do you have a risk management department?

☐ No ☐ Don't know ☐ Yes

7. How many employees do you have?

☐ Less 50 ☐ 50 - 100 ☐ 100 - 500

☐ 501 -1000 ☐ over 1000

8. Which of the following statements describes the caliber of the senior management? staff in your organization?

☐ No technical and management training

☐ Technical specialist with no management training but with on the job experience

☐ Technical specialist with management training

☐ Professional management with business and management training

☐ Others (please specify) _____

Part B Risk Management

I Risk policy

9. Does your organization have a formally approved risk management policy?

☐ No ☐ Don't know ☐ yes

10. Who provides the final approval of your organization's risk management policy?

☐ Credit committee ☐ Risk committee ☐ Audit committee

11. Has your organization objective and tolerance for risk been clearly specified in your risk management policy?

☐ Yes ☐ No ☐ Don't Know

12. Is your organization risk management policy based on comprehensive profile of business risks likely to impact business in the next coming year?

☐ Yes ☐ No ☐ Don't Know

13. Do you believe that your organization's current risk management ways work well?

☐ Yes ☐ No ☐ Don't Know

14. How important is effective risk management in your organization is?

☐ Critical ☐ very important

☐ Marginally important ☐ unimportant

15. Is your organization risk management ways in line with goals and objectives?

☐ Fully ☐ partially ☐ No ☐ Don't know

II Risk Structures

16. Who has the overall responsibility for risk management process in your organization?

☐ Credit committee

☐ Audit committee

☐ Finance manager

☐ Others please specify? _____

17. Has your organization implemented any of the following risks committees (tick as many as possible?)

☐ Risk committee board

☐ Executive risk management committee

☐ Risk steering committee

☐ Others please specify _____

18. If your organization has established a risk committee is it combined with the board of audit or supervisory committee? _____

_____

19. Who are the members of the risk committee (tick as many as possible)

☐ Committee members

☐ Supervisory and committee members

☐ Management committee and supervisory committee

☐ Others please specify _____

20. Who chairs the risk committee?

☐ Management committee chair

☐ Supervisory committee chair

☐ Finance manager

☐ Others please specify _____

21. How often does your risk committee meet to review the risk profile. risk mitigation and risk tolerance of your organization?

☐ Monthly ☐ quarterly ☐ annually

Others please specify _____

22. Of the following which are the predominant risks your organization faces? (tick as many as possible)

☐ Banking risk ☐ Interest rate risks

☐ Marketing risks ☐ Liquidity risks

☐ Operational risk ☐ credit risk

☐ Foreign exchange risk ☐ Fraud risk

☐ Legal risk ☐ financial risk

☐ Information technology risk

☐ Others please specify _____

23. Which of the following statements best applies to your organization in relation to responsibilities of the risk committee?

☐ The risk committee responsibilities have been defined and documented

☐ The risk committee responsibilities have not been defined clearly

☐ The risk committee's responsibilities have been documented but not defined

24. Which of the following activities apply to your organization in relation to the usage of risk management systems or processes (tick many as possible)

☐ Regular reporting to risk management committee activities and incidents

☐ Business unit risk assessments

☐ Compliance audit functions

☐ Internal audit functions

☐ Early warning reported to escalate material risks

☐ Integrated risk management systems

25. If the internal Audit function plays a role in the risk management activities of your organization, what are the reporting lines for this function?

☐ Audit committee

☐ Management committee

☐

☐

☐

Finance management

Supervisory committee

Others (specify) _____

III RISK CONTROL

26. Does your organization a risk /return analysis to help determine the risk tolerance and objectives?

☐Yes ☐No ☐ Don't Know

27. If your organization performs risk /return analysis, how often is this done?

☐ Monthly ☐ annually ☐ quarterly

☐ Others please specify _____

28. Does your organization formally evaluate the effectiveness of existing risk management controls and the cost of controls?

☐Yes ☐No ☐ Don't Know

29. Which of the following methods apply to your organization in relation to the validation processes employed in risk management? Tick as many as possible)

☐ External audit

☐ Risk management reviews

☐ Internal audit

☐ Control risk self assessment

☐ Consultant reviews

☐ Independent quality audits

☐ Regulatory compliance certification

30. Indicate the level of your organization reliance upon each of the applicable validation process

Validation method	High	Medium	Low
External audit			
Risk management reviews			
Internal audit			
Control risk self assessment			
Consultant reviews			
Independent quality audits			
Regulatory compliance			

certification			

iv. Risk portfolio

31. How satisfied are you with level of credit management in your organization?

☐ Excellent ☐ satisfactory ☐ good

☐ Unsatisfactory ☐ don't know

32. Which criteria does your organization use to assess the impact of its risks (tick many as possible)

☐ Financial ☐ Regulatory / compliance

☐ Others (please specify) _____

33. Does your organization use any technology tools or software to drive the risk management process?

☐ No ☐ Yes ☐ Don't know

V. Measuring and Monitoring Risks

34. Which of the following methods are (is) used by your organization in measuring and monitoring risk (tick as many as possible)

Internal audit used to monitor performance of your risk program

☐ Risk committee for independent oversight

☐ Key risk indicators are used to measure risk management process

35. If your organization uses internal audit to monitor the performance of the risk management program how often is it done?

☐ Monthly ☐ annually ☐ others (Specify) "_____

36. Which methods are used to report risk in your organization

☐ Annual report

☐ Media briefings

☐ Not reported

☐ Others please specify _____

37. If your organization uses annual report to report risk management activities, what risk management information is included in it?

☐ A description of the risk faced by the organization

☐ A description of risk management approach by the organization

☐ A risk management declaration by the management committee

38. Briefly highlight the challenges you face in risk management in your organization

_____

_____

_____

_____

_____

_____

_____

_____

Filled by designation

Thank you for your cooperation

APPENDIX II: List of sacco operating fosa in Nairobi

1. Kenversity sacco
2. Tembo
3. Nacico
4. Lompasago
5. Shirika
6. Stima
7. Mwito
8. Kingdom
9. Ardhi
10. Harambee
11. Ukulima
12. Njiwa
13. Imara
14. Telepost
15. Ufundi
16. Magereza
17. Transcom
18. Mwito
19. Mwalimu
20. Asili
21. Chuna
22. Nation
23. Afya
24. Ufanisi
25. Chai
26. Wanandege
27. Jamii
28. Elimu
29. Maisha bora
30. Kenpipe
31. Sauti
32. Reli

33. Lenga tumaini
34. Comoco
35. Police
36. Un sacco
37. Kenya bankers sacco
38. Waumini
39. Nassefu
40. Nest
41. Ukristo na ufanisi
42. Wanaanga
43. P.C.E.A