

**THE EFFECT OF CREDIT RISK MANAGEMENT PRACTICES ON  
FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCOs IN  
KENYA**

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## **DECLARATION**

This research project is my original work and has not been presented for an award to any other University.

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To my father, Mr. Samuel Jeddi, who believes in my ability and stood up for me when I thought all hope was lost, and the living memory of my parents, Mr. Emmanuel K. Gegeh and Miss Brenda Domah, I dedicate this project.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>CAMEL</b>	Capital Adequacy, Asset Quality, Management Quality, Earnings and Liquidity
<b>DTS</b>	Deposit Taking SACCOs
<b>EPS</b>	Earnings per Share
<b>ERM</b>	Enterprise Risk Management
<b>ROA</b>	Return on Assets
<b>ROE</b>	Return on Equity
<b>ROI</b>	Return on Investment
<b>SACCO</b>	Savings and Credit Cooperatives
<b>SASRA</b>	SACCOs Societies Regulatory Authority
<b>SD</b>	Standard Deviation
<b>WOCCU</b>	World Council of Credit Unions

## **ABSTRACT**

Deposit-taking SACCOs have become important players in the financial sectors and are contributing meaningfully to the overall economy; hence their ability to achieve their set objectives and keep solvent should be of importance to all interested parties. The goal of this research was to establish the effect of credit risk management practices on the financial performance of deposit-taking SACCOs in Kenya. The study adopted a descriptive cross-sectional survey research design, primary and secondary data were collected and used, the respondents were heads of credit risk management functions of 41 deposit-taking SACCOs in Kenya. Quantitative analysis was analysed through descriptive statistics such as percentages and frequency counts. Findings from the research revealed a positive relationship between the independent variables (credit risk management practices) and the dependent variable (financial performance) of deposit-taking SACCOs in Kenya. From the findings and conclusion, the study recommends that organizations should enhance credit risk management practices which include portfolio asset quality/portfolio management, SACCOs loan policy procedure, risk monitoring, risk analysis and assessment, credit scoring mechanism.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Credit risk has become a serious concern for financial institutions worldwide, this has led to commitment financial institutions committing themselves to prudential lending. However, Ahmed (2002) has noted that in the absence of loans, there can not be an achievement of any significant development worldwide. Consequently, many financial institutions are devising credit management schemes that minimize or prevent credit crisis and loan losses. Hence, effective credit management is paramount to for the achievement of the entity's objectives and to maintaining optimum levels of financial success. According to Santomero (2007) credit risk should be taken seriously as it has a potential of preventing lending institutions from meeting their optimum levels of financial performance. Credit risk occurs as a result of a borrower's inability to settle his financial obligations, leading to losses for the financial institutions (Santomero,2007). The institutions are therefore advised to design and implement practices of credit risk management that capable of identifying risks already existing and risks that may arise in each environment and implement strategies to counter them.

With rising global economic issues affecting businesses including financial institutions all over the world thus leading to very high cost of lending by mainstream financial institutions to businesses, small businesses, medium sized enterprises and families are now largely turning to cheaper alternative sources of financing their businesses and or

personal needs, a gap that Savings and Credit Cooperatives (SACCOs) are immensely filling in most low to medium income countries.

According to (SASRA, 2014), the WOCCU report for 2014 recorded a total of 57,000 Credit Unions (SACCOs), spread across 105 countries and 6 continents. The world's credit union system has a combined savings of \$ 1.5 trillion (US dollars) and an asset base of \$ 1.8 trillion (US dollars) out of which \$ 1.2 trillion (US dollars) constituted the loan portfolio. The average worldwide penetration rate of the credit union system stood at 8.2 percent. This is the extent to which SACCOs are impacting financial services delivery worldwide, and at rates far lower than those being offered by conventional credit institutions, hence, the management of credit risk effectively is an important component of an approach to risk management that is comprehensive and important to the organization's achievement of its strategic objectives (Bofondi and Gobbi, 2003).

In Kenya, Savings and Credit Corporative Societies (SACCOs) are no different from micro finance institutions in other parts of the world. Sound practices of credit risk management have been designed by some SACCOs in order for financial objectives to be met. It may be difficult, however, to come up with optimal credit risk management practices in SACCOs because of constant fluctuations in economic conditions. According to Pandey (2008) SACCOs must develop strategies to safeguard their credit management operations. This is necessary because SACCOs generate their revenue from credit given out to individuals in the form of interest charged on the funds granted from whom loan repayments may be uncertain. Studies show how loan request applications are being

decided upon based on the subjective feeling about risk as it relates to the borrower's repayment. (Fayman& He, 2011). Common credit risk management practices used in SACCOs incorporate the making of decision on the financial data and judgmental assessments of how the market looks, borrower, the management and the shareholders. Three theories, including the Credit Risk Theory, Portfolio Theory to Credit Risk management and the Theory of Internal Controls form the basis of this study.

The CAMEL rating system is what is used by the Central Bank in Kenya; it is an acronym for Capital Adequacy, Asset Quality, Management Quality, Earnings and Liquidity to assess the soundness of financial institutions (CBK, 2010). According to SASRA (2012) during the year, a standardized methodology for evaluating and assessing safety and how sound those SACCOs business through the CAMEL rating was adopted by the authority. Targeted areas by the evaluation tools include all areas that expose significant risk from "going-concern perspective of the SACCOs, particularly: inadequate funds to face any potential or unexpected losses arising from problem loans or investments in risky capital; deterioration of the credit portfolio as the major asset for generating income; inability of the SACCO to generate adequate revenues to cover the expenses; and continuously not being able to respond to the needs of both depositors and creditors due to lack of funds. However, literature review shows that although credit risk is still the major risk faced by organizations, the application of modern portfolio theory to that risk is still wanting. (Margrabe, 2007). Mwisho (2001) concluded that in practice credit risk measures focus on the tradeoffs between risks and returns. That is, calculating the risk that each product or activity has and then accordingly charging for capital needed

for its support. This however, does not resolve the issue of loan losses which significantly pose challenges in SACCO management.

### **1.1.1 Credit Risk Management**

Credit is the probability of loss because of a borrower's inability or failure to pay back on his debt. Yegon (2014) defined credit risk management as an approach (structured) to managing uncertainties through risk assessment, developing strategies to manage it and mitigation of risk through the utilization of resources available to management. Meanwhile, credit risk management is the process of understanding how adequate a bank's loan loss reserves and capital are at any given time in order to mitigate these losses.

Many strategies for credit risk management exist. For the purpose of the study, credit risk is going to be categorized into four main categories. Credit risk can be managed by accepting all or part of the consequences of a risk and setting up a budget for it. Other entities simply pass the risk on to a third party by means of insurance, like in the case of insuring against currency devaluation. Institutions can simply use avoidance of a particular risk as another strategy for managing that risk and finally, the risk's negative effects can be reduced by management through practicing what is known as Risk based pricing. An important aspect in maintaining a successful and responsible financial institution or company is having a risk management plan. Because of its importance in safeguarding both financial and physical assets, companies must engage in the practice.

There are several credit risk management practices being employed by different entities with respect to the different needs of those institutions, one of such practices is credit scoring. This is carried out by analyzing a potential borrower's files from previous credits to establish the credit worthiness of that person. Buck, Liu and Skovoroda (2008) argue that many institutions, including SACCO, have been employing credit scoring as their major evaluation tool. The likelihood of default on repayment of loans by prospective borrowers can be evaluated by the use of credit scoring, it helps determine people who are qualified for loans, the interest rate to use, the limit of credit to set for each borrower; and in determining the source of the highest revenues. The use of credit scoring to identify creditworthy clients for granting credit has been found to be a reliable system which may result into increased financial performance (Gay, 2002).

Another practice is establishing an appropriate credit administration. An administration system that is effective and efficient will help upper level management to observe the overall quality of the entire loan portfolio and the trend it takes. As a result, the management could adjust or reassess set policies and strategies and take preemptive actions before any adverse situations deteriorates (Onaolapo, 2007).The SACCOs' policies on credit should clearly provide procedural guideline that relates to credit scoring and credit risk monitoring (Onaolapo, 2007). Credit analysis is geared toward generating income generating loans while at the same time avoiding huge risks.

A third and widely used credit risk management practice is establishing a credit policy. Credit policies are institutional methods used for analyzing credit requests and criteria set

for the acceptance or rejection of these requests. (Girm` 1996). As (Gasbarro et al., 2002) stated, the financial performance of all financial institutions are greatly affected by the credit policies of those institutions. They affect the capital adequacy, asset quality, management quality, earnings and liquidity of a financial institution favorably or unfavorably based on the strength of the policy and the implementation level. Many studies have attributed the main cause for adverse financial performance of lending institutions to poor practices of risk management (Chijoriga, 1997).

And finally, institutions must practice rigorous credit risk monitoring activities. For an institution's risk monitoring to be effective, it must identify and measure all risk exposures that are material. Hence, activities entailing the monitoring of risks must be enhanced by IT facilities that keep managers updated with real time info on the entire loan process, beginning from application to disbursement to successful applicants, and the loan recovery process, this allows for quick decision and actions in the event there is a likelihood of loan loss or some immediate managerial decision to be made. (Gallagher, 1989).

### **1.1.2 Financial Performance**

Financial performance measures how a firm's management can generate profit by efficiently utilizing assets from its main business activities. (Harker, &Stavros, 1998). The performance of a firm has over the time been measured by the use of financial ratios. (Ogilo, 2012). A SACCO is a cooperative established and run by its members with the

objective of providing loans at low rates of interest as well as other financial services for both its members and at times the general public.

Parast and Fini (2010) indicate that organizations are looking for strategies to improve their operating performance and enhance their profit levels. Organizations are now more determined to reduce their costs of operations thereby enhancing profits due to the intense competition and advancement of new technologies. Similarly, financial performance of SACCOs can also be viewed in light of their overall profitability and return on investment. Herrmann (2008) said, when we do an analysis of a firm's profitability, we are concerned with evaluating how much a firm earns in proportion to the level of sales, assets employed or the owners' investment. In doing so, the common profitability measures include the income statements; the return on total assets (ROA), return on equity (ROE), earnings per share (EPS) and the price-earnings ratio (PE). Under the income statement, items on the income statement are expressed as a percentage of sales, which is operating margin, gross margin or profit margin, where gross margin represents the percentage of the sales dollar that remains after the cost of goods sold has been paid. On the other hand, the operating margin is percentage of sales dollars after deducting expenses incurred, excluding taxes interest, while profit margin is a percentage of sales dollar after all expenses, including taxes and interests, have been paid.

ROA considers how much was generated on the investments, and shows how effective the management is in managing the assets employed, therefore, the higher the better. ROE indicates the return on owners' equity, therefore, the higher the better. Earnings per

share (EPS) indicate the how much dollar was earned for each common share, again, the higher the better. The amount that investors see as fit to pay for each dollar earned is the price-earnings ratio; this shows the confidence of investors (Herrmann, 2008). In this study, return on equity (ROE) will be our measure of financial performance for DTS.

### **1.1.3 Credit Risk Management Practices and Financial Performance**

Deposits taking SACCOs are involved in a business characterized by risks and critical to these SACCOs positions being maintained amid the high levels of competition in the market, factors of risk including operational and market risk, credit and liquidity must be identified. Every financial entity's viability rests upon how effectively they manage these risks (Khan and Ahmed, 2001).

The need for credit risk management in institutions whose principle line of business entails lending finances out to individuals and institutions can never be over emphasized as it has a direct effect on the financial performance of these institutions. Credit risk does not only serve as an obstacle to financial performance in terms of net operating profit realization and increased wealth maximization for the owners, circumstances like default in payments eventually lead to huge losses in capital, hence these institutions must have a direct financial interest in reducing these risks, (Schroeck2002). According Schroeck (2002) to ensure that earnings are increased, best practices through cautious risk management must be employed.

### **1.1.4 Depositing Taking SACCOs in Kenya**

There are two subsectors in the SACCO sector in Kenya, deposit taking and non deposit taking, SASRA regulates the activities of deposit taking SACCOs whereas the commissioner for cooperatives supervises the non deposit taking SACCOs. SACCOs that are registered under the Cooperative Societies Act, CAP 490, are licensed by SASRA. There was an increase in growth of 17.2% (ksh 257, 368 millions to ksh 301,537 millions) from 2013 to the reporting year ending 2014. Deposits grew at 12.7% (ksh 182,683 millions to ksh 205,974 millions) while capital reserves increased at 30.6% (ksh 32, 991 millions to ksh 43, 086 millions). The industry also saw a growth in the portfolio of the loans and advances of 15.5% during the same period (from ksh 197,409 millions to ksh 228,524 millions) and there was a 15.3% increase in total membership (SASRA, 2014).

One hundred eighty-four licensed deposits taking SACCOs were licensed in Kenya for the 2014 operating year, but three of them had their licenses revoked for the 2015 operating year because of continuous inability to address issues of non compliance which risked the interests of members and the financial health of the entities. The deposits taking SACCOs whose licenses were revoked were directed to revert to only business under the Cooperative Societies Act. Hence, a total of 181 DTS were licensed to operate for the year 2015 (SASRA, 2014).

Wambugu (2008) who studied credit risk practices by micro finance institutions (MFIs) in Kenya found that most MFIs had clearly defined credit policies which will be reviewed annually and goals which will be formulated by credit committees and credit control department. Ngare (2008) on the other hand did a survey of credit risk management practices by financial institutions in Kenya. Despite the development and use of very refined tools and models for measuring of Financial Institutions exposure to Credit Risk, the default rate in the SACCO'S in Kenya remain relatively high. For example the Amount of defaulted loans for Kenyan SACCO'S rose from Ksh.5 Billion in the year 2007 to over with Ksh10 Billion in 2012 (MOCD,2009). Several issues including the capital adequacy levels in the SACCO system, roles played by rating agencies in financial regulation and the assessment of SACCOs' assets fair value are the challenges debated the most. Immense changes have been carried out in the SACCOs regulatory system as a result of these crises. However, shortcomings like the lack of risk sensitive measure of credit worthiness and weak incentives for SACCOs to strengthen their systems for monitoring risk management still exist (Porvali, 2011).

## **1.2 Research Problem**

Challenges, including credit risks are inherent in the activities of financial institutions due to the fact that they are not certain (Laurentis, 2009). Hence, as Nancy (2001) notes, efficient credit risk management processes are required to help SACCOs come up with policies that will prevent operating losses due to uncertainties. However, SACCOs establish internal controls and procedures and make regular reviews of the internal audit

so as to guarantee the compliance of rules in the performance of duties in the credit management departments by employees.

Deposits taking SACCOs are now important players in the financial institutions market globally. Cost of finance in the mainstream financial markets are increasing everyday leading to SMEs and individuals seeking alternative sources of funding. In order to stay in business and experience financial success, they must always remain financially viable. This not only benefits the institutions, they also immensely contribute to the nations GDP (SASRA, 2014).

Many studies in Kenya; Nyoro and Ngugi (2007), Mwangi and Wanjau (2012), Njagi, Kimani and Ngugi (2012), Gicheru, Migwi and M'Imanyara (2011), Kiaritha (2009) Auka and Mwangi (2013) and Mauka, Munene and Muturi (2013) were carried out on SACCOs in sectors such as the agricultural sector, the transport industry, teachers' SACCOs and on SACCOs in Kenya generally. The empirical studies focused on the different challenges that affect the performance of SACCO's (Achou&Tenguh, 2008). In studies conducted before regarding credit risk management, researchers tried to examine the methods that could possibly be used to manage credit risk. Some of such methods include using credit risk rating, how the financial positions of prospective borrowers impacted credit risk management and the impact of relation of borrower and lender on credit risk management. Even though a number of studies have been conducted on credit risk management and related issues both in Kenya and abroad, it is difficult to believe that these studies comprehensively examined the effect of credit risk management

practices of SACCOs specially in Kenya. As a result, this study examined the effect of credit risk management practices on financial performance of deposit taking SACCOS in Kenya.

### **1.3 Research Objectives**

#### **1.3.1 General objective**

To determine the effect of risk management practices on financial performance of DTS.

#### **1.3.2 Specific objectives**

- i. To determine the effect of credit scoring on financial performance among DTS.
- ii. To find out the effect of credit administration on financial performance among DTS
- iii. To establish the effects of credit policies on financial performance among DTS
- iv. To assess the effects of credit risk monitoring on financial performance among deposit taking SACCOs

#### **1.3.3 Research Questions**

- i. What are the effects of credit scoring on financial performance among deposit taking SACCOs?
- ii. What are the effects of credit administration on financial performance among deposit taking SACCOs?
- iii. What are the effects of credit policies on financial performance among deposit taking SACCOs?

- iv. What are the effects of credit risk monitoring on financial performance among deposit taking SACCOs?

#### **1.4 Value of the Study**

The study shall assist SACCOs' administrations to appreciate credit risk management and its impact on financial performance. Management will also have opportunity to review credit risk management practices as well as their impact on financial performance. The study also shall assist government agencies in developing regulatory and legislative framework that will assist SACCOs in developing and adopting sound credit risk management practices in Kenya. In addition, the study shall be of importance to the academic community since it shall broaden the knowledge on credit risk management practices and the practice of applying modern portfolio theory to credit risk and financial performance of SACCOs in Kenya. This will provide a basis for future research.

# **CHAPTER TWO**

## **LITERATURE REVIEW**

### **2.1 Introduction**

A review of other literature related to the topic under study will be presented in this chapter. It gives an overview of the theoretical framework and empirical review of the relationship between our two sets of variables, the dependent and independent.

### **2.2 Theoretical Review**

This research study was guided by three theories namely; credit risk theory, portfolio theory to credit risk management and theory of internal controls.

#### **2.2.1 Credit Risk Theory**

Although it is an established fact that institutions have faced credit risk since early time, the topic has not extensively been studied till lately. Literature prior to 1974 on credit uses traditional actuarial methods of credit risk ,which is difficult because it relies on data from past times. To date, three quantitative approaches exist for analyzing credit risk: structural approach, reduced form appraisal and incomplete information approach (Crosbie *et al*, 2003).

The Credit Risk Theory was introduced by Melton in 1974 and it asserts that the default event derives from a firm's asset evolution modeled by a diffusion process with constant

parameters. These models are normally models that are structural and based on issuer specific variables. Losses in this category due to default are as a result of factors outside of the firms sphere of control but that are also specific to that industry. This explains that the inability to repay occurs as early as the beginning through the maturity stages of a corporate bond (Longstaff and Schwartz.1995).

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

From the 1980's, credit unions have, with success been able to use the Modern Portfolio to market risks. Several of them are currently applying the value at risk models to handle their interest rate and exposures to risks in the market. Sadly, the use of modern portfolio theory to credit risk has lagged, hence the largest risk facing financial institutions is credit risk (William Margrabe, 2007).

According to Korir (2012), the negative impact of credit concentration on financial performance has been observed by credit facilities. Due to this, several of these credit lending institutions are now using approaches that are more quantitative in nature to the management of credit risk, even though the issue of data still remains a challenge. Considerable steps forward are also being made toward coming up with new ways of measuring credit risk based on the entire portfolio. The use of credit derivatives is also being employed for the efficient transferring of risk while at the same time maintaining customer relationship. As a result of these developments, credit risk management in context of an entire portfolio is making serious progress.

### **2.2.3 Theory of Internal Controls**

The safe and sound operation of an organization relies heavily on how effective its internal controls are. The goals and objectives of an organization being achieved, meeting of long-term targets and the maintenance of dependable financial and managerial reportage are all reliant upon a system of strong internal controls. Maintaining such systems of internal controls enables organizations operate in compliance with rules and regulations and policies, as well as procedures and rules laid down internally. This reduces the risk of unforeseen losses damages to organizational character (Barnabas, 2011).

The importance of this theory to the topic under study is that policies of internal controls, procedures and rules must be clearly define and adhered to by SACCOs. This theory indicates that there should be transparency and guiding policies and controls to avoid misuse of the cash which may lead to poor financial status of the SACCO.

### **2.3 Determinants of Financial Performance**

It is of importance, not just to all stakeholders, but to investors as well to do an analysis the determinants of financial performance. Many factors, including how profitable the company is, the risks associated with the business and economic growth are all determinants of the value of shareholders, or the firms market value according to (Chijoriga, 2007). Contrary to this, (Brief & Lawson, 1992; and Peasnell, 1963) argue that value for shareholders are based on financial indicators derived from accounting information. They further argue that an entity's financial performance is a result of its

market position. They broke profitability into two components, profit margin and turnovers.

Profitability of a firm can be influenced by the two factors, asserts (Ross 1996). Since high turnover is an indication of efficient utilization of the entity's assets, higher profits margin shows a huge market power. Two other factors that influence financial performance are risk and market growth. Changes in market values can be caused the entity's risk exposure level. Due to the fact that market values takes into consideration expected future profits, economic growth is an important component that helps in achieving a better market position. A company's size also positively affects financial performance. The larger the firm, the easier the access to key production factors; and the higher the likelihood of acquiring funding cheaper (Chijoriga, 2007).

Barton & Gordon (1988) made a suggestion that because companies with high rates of profits can finance their own projects, they will remain low leveraged. Conversely, an entity faces increased risk of bankruptcy if it is highly leveraged. A company's financial performance has been known to be influenced in a positive way by its total assets, where greater amount of assets means less risk.

Although studies that have sought to review the link between financial performance and turnover have been mostly not conclusive, a large turnover volume has not been connected with better performance. With the passage of time, entities' objectives have changed. Sustainable long-term growth is now replacing the desires for short-term

profits; hence, a superior growth rate that is sustainable will positively influence performance. Listed companies' ability to distribute dividends regularly is a proof that they are stable, however, up to now, there has been no established link between dividend distribution and profitability since many other uses exist for profits (Chijoriga, 2007)

## **2.4 Empirical Review**

### **2.4.1 Global Studies**

Ogboi and Unuafe (2013) conducted a study on how credit risk management and capital adequacy impacted financial performances of Nigerian commercial banks. The study aimed to establish the extent to which huge scarce resources invested in credit risk management by commercial banks was affecting their financial performance. Investigation into the extent to which credit risk, along with capital adequacy, affected financial performance of banks in Nigeria was conducted using regression analysis. Six out of the twenty-one commercial banks operating as at 2009 were the sample for this study. The evidence provided in this study, revealed that a comprehensive credit management procedure, and adequate capital are recipes for profitability. This study goes to the core of the area of study, as these SACCOs are also financial institutions.

Nawaz and Munir (2012) conducted a study on credit risk and the performance of Nigerian banks. Of the twenty four banks operating in Nigeria at the time, six were selected. Data for 2004 – 2008 from audited annual reports and accounts of these banks. The data included time series and cross section on loans and advances, non-performing loans, total deposits, profit after tax and total assets of the sampled banks. Correlation and

multiple regression models were used to analyze the data. The study concluded that credit risk management had an important impact on the profitability of banks in Nigeria. As a result of this finding, the researchers recommended that management carefully set up policies on credit that will enhance profitability and know how these policies affected the banks operations to guarantee careful use of deposits.

Pagach and Warr (2007) examined factors influencing the firm's level of ERM. Findings revealed that the higher the firm's leverage level, the more unpredictable are their earnings. The study used the hazard model to look at factors that persuade firms' adoptions of the ERM, and discovered that firms that mostly chose to adopt ERM are those that are more leveraged, with unpredictable earnings and whose stocks were performing weakly. Additionally, where CEO's option was greater and stock portfolio was increasingly volatile; there was increased likelihood of adopting ERH. Findings from the study were that not only was ERM adopted for managing basic risk, it was also being adopted to counterbalance the risk taking incentives of CEOs. One main objective also was the pursuit of improvement in the operational performances of these banks. In the same vein, Drzik (2005) reveals that during the 1990s, an increased investment by banks in risk management led to reduction in how volatile earnings and losses were during the recession of 2001.

A study by Tucker and Miles (2004), looked at three series of data for the period between March 1999 to March 2001 and that micro finance institution that were self sufficient

performed better and were more profitable, based on ROE and ROA, as compared to their counterparts in the third world countries and others that had not become self sufficient..

Hakim and Neamie (2001) conducted a study in Lebanon and Egypt in the nineties where they looked at the performance of banks based on the use of credit risk practices. Data from the two countries between 1993 and 1999 was used. The results reveal that variables of credits and profitability positively correlate whereas variables of liquidity had no impact on profitability for all the institutions.

#### **2.4.2 Local Studies**

Kalui & Kiawa (2015) researched the effects of credit risk management procedures on financial performance among microfinance institutions (MFIs) in Kenya. The purpose said research was to analyze the credit risk management procedures adopted on financial performance of MFIs Kenya. Specifically, the objectives were to determine to what extent risk identification, risks monitoring procedures, and risk analysis and assessment procedures are applied in credit risk management by microfinance institutions in Kenya and their overall effect on the financial performance of the MFIs. The study adopted the descriptive design. The population of the study was consisted of credit managers and officers in the 54 Microfinance Institutions in Nairobi County. Data analysis was based on descriptive and inferential statistics. Data analysis was done using the Statistical Package for Social Sciences (SPSS). The study found out that the organizations considered risk identification, risks monitoring, risk assessment, risk analysis as a process in credit risk management. The study established that these procedures were important as

they ensured that the task of managing risk was established in the entire entity. The study concludes that the managements of the Microfinance institutions are enhancing their credit risk management by ensuring measures to limit risk and improve efficient services.

Matere (2013) did a research on credit risk management practices, but this time on how it affected financial performance of private hospitals in Kenya. The design used in this study was causal. The fifty licensed private hospitals in Nairobi were the study's population. A census approach was adopted and the respondents were the managers from these hospitals. Data used in this study were from two sources, primary and secondary. A 5-point likert scale was used to determine the impact of credit management practices on performance of private hospitals in Kenya. Descriptive statistics such as means, standard deviation and frequency distribution were used to analyze the data. Findings from this study was that credit risk management procedures can be used to influence profitability of the private hospitals and the study recommends the management of the private hospitals to oversee facilitation of credit risk management through a high level of standardization of its processes and documentations .

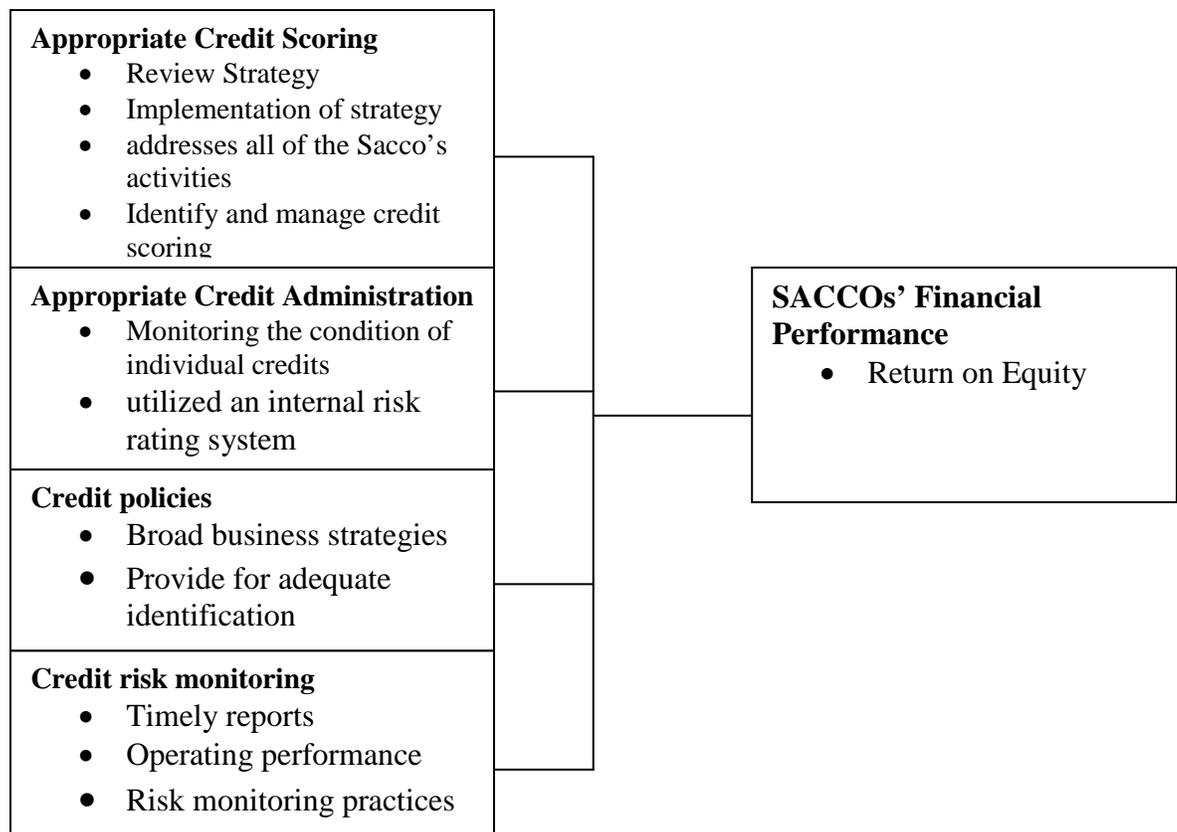
Kiplimo & Kalio (2012) investigated how loan performance of MFIs in Baringo county were influenced by credit risk management practices. The study employed a descriptive research design and was based on a survey of MFIs in Baringo County. The target population in this study was managers and credit officers in MFIs in Baringo County. Census sampling technique was used because all branch managers and credit officers were directly targeted in this study. Conclusion from the study was that there is a positive

relationship between client appraisals and performances of loans. The study as a result of increase in client appraisal, there were increases in the financial performances of MFIs in Baringo County. The study therefore concluded that loan performances of MFIs in Baringo County were influenced to a greater extent by credit risk management practices.

Gaitho (2010) conducted a surveyed on credit risk management practices by SACCOs in Nairobi. 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. A finding from the study shows that most SACCOs used credit risk management practices to objectively appraise risks in lending out funds. 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 study also found out that SACCOs relied too much on the judgment and ability of portfolio managers for effective credit risk management practices instead of instituting standardized credit risk management procedures. This establishes the need for researching how standardized credit risk management practices like appropriated credit administration, credit policy, credit scoring and credit monitoring affects the financial performance of these SACCOs, thus encouraging their practices by these SACCOs.

## 2.5 Conceptual Framework

The study adopted a conceptual framework that shows relationship between independent variables (credit scoring, credit administration, credit policies and credit monitoring) and the dependent variable as indicated in Figure 2.1.



**Figure 2.1 Conceptual Framework**

## 2.6 Summary of Literature Review

The study reviewed three theoretical foundations; credit Risk theory, the theory of internal controls and the portfolio theory to credit risk management. Empirical review on studies relevant to the topic of the studies from both the local and international scenes and some determinants of financial performance were outlined and discussed. A

conceptual frame work depicting the relationship between the two sets of variables was drawn up. Numerous studies relating to credit risk management has been carried out worldwide, but none of these studies exhaustively examined the effect of the actual practices on the financial performance of DTS in Kenya. As a result, this study set out to examine same.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Contained in this chapter is a description of the methodology used by the researcher in conducting the study. The study design and the population are also discussed. In addition, the sampling design, the instrument that was used to collect the data and data analysis are also described.

#### **3.2 Research Design**

The researcher adopted a descriptive cross-sectional survey research design in this study. This design is appropriate because of the investigations of organizations at the same point in time and it describes and undertakes comparative analysis of an event, situation, and a group of people, community or a population over a particular period of time (Chandran, 2004). In this case, data was gathered relating to credit risk management practices and financial performance of SACCOs in Kenya.

#### **3.3 Population**

Population is defined by Mugenda & Mugenda (2003), as being a group of individuals, events or objects having a unique characteristic that can be observed. As its population, this study used all deposit taking SACCOs in Kenya. As per SASRA's report, there were a total of one hundred sixty-four (164) registered DTS in Kenya as at January 1, 2016.

### **3.4 Sample Design**

A method of choosing part of an entire population so that the population can be represented accurately is called a sampling (Chandran, 2004). For this study, the researcher made use of the probability sampling method. The study's sample size (n) was thirty percent of the entire population, which according to Mugenda & Mugenda 30% is sufficient for such a study. Consequently a total of forty-nine (49) deposit taking SACCOs formed the sample.

### **3.5 Data Collection**

Two kinds of data, primary and secondary were used. Primary data collection technique involved the use of a semi-structured questionnaire containing both open and closed ended questions. The questionnaire comprised a Section A which focused on the profile (demographics) of the responding SACCO and a section B which contained questions aimed at determining the effects of credit risk management on financial performance of DTSSs. The respondents were heads of credit risk management function in the SACCOs. The questionnaires were hand delivered to the SACCOs and later retrieved by the researcher.

The questionnaires were the preferred data collection instrument. According to Robson (2002) large amounts of data at relatively low costs in a short period may be collected using questionnaires alongside a ensuring that respondents remain unidentified, making it easier for them to freely speak up on sensitive matters like governance. Secondary data was gathered from SASRA's annual reports which contain relevant information relating

to SACCOs credit risk management and financial performance indicators in Kenya. The main respondents of the study were individuals responsible for establishing and implementing credit risk management practices, these individuals were drawn from the top, middle and lower levels of management of the SACCOs.

### **3.6 Data Analysis**

Quantitative data was generated. The data collected was refined, coded and systematically organized in a mode that facilitated analysis using the Statistical Package for Social Sciences (SPSS) version 21. Quantitative analysis was analysed through descriptive statistics such as percentages and frequency counts. Measure of central tendency such as mean and measures of dispersion such as standard deviation were also used. The study additionally, ran inferential analysis to assess the relationship between independent and dependent variables where applicable. The inferential tests multiple linear regression analysis. The multiple linear regressions were of the form:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Data analysis method was based on Pearson correlation analysis and a multiple regression model which took the form of:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where: Y = Financial Performance

X1 = Credit scoring

X2 = Credit administration

X3 = Credit policies

X4 = Credit risk monitoring

X5= Size

$\beta_0$  = Constant

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$  = Regression coefficients or change included in Y by each X value

$\epsilon$  = error term

### **3.6.1 Test of Significance**

F-test was used to test the joint significance of all coefficients and t-test for the test significance of individual coefficients. The significance of the regression model was determined at confidence interval and 5% level of significance.

## **CHAPTER FOUR**

### **DATA ANALYSIS, RESULTS AND INTERPRETATIONS**

#### **4.1 Introduction**

In chapter four, results and findings gathered from responses from the field and data will be presented. First, descriptive statistics will be applied using statistical measures including charts, mean, graphs and standard deviation in order to understand the nature of the results. Regression will then be carried out to conclude on the relationship amongst the variables.

#### **4.2 Response Rate**

Forty-nine (49) questionnaires were distributed to offices of the selected SACCOs, out of which forty-one (41) were dully completed and picked up by the researcher from the respondents. The rate of response was then calculated at 83.67%, which is in concords with Mugenda and Mugenda (2003). They hold a response rate of 50% as being sufficient for generalization while for analyzing and reports, 60% is good. And at 70% or above, it is excellent; hence 83.67% was excellent for this analysis. The level of response can be ascribed to the process used in collecting the data, where the researcher informed ahead of time the potential participants after which the questionnaires were dropped off and subsequently picked up days later, giving the respondents sufficient time to answer the questionnaires correctly. Hence the study could make the right conclusions because the rate of response was sufficient.

**Table 4.1: Response Rate**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Filled-in Questionnaires	41	83.67
Unreturned Questionnaires	8	16.32
<b>Total</b>	<b>49</b>	<b>100.00</b>

### **4.3 Data Validity**

Cronbach's Alpha, used for measuring internal consistency, was used to evaluate how reliable the questionnaire was. For analysis of reliability, SPSS version 20 was applied to calculate the Cronbach alpha. The value of the alpha coefficient ranges from 0-1 and may be used to describe the reliability of factors extracted at 0.5 significance level from dichotomous and or multi-point formatted questionnaires or scales (rating scale: 1 = poor, 5 = excellent). When the value is higher, it indicates a more reliably generated scale. Cooper & Schindler (2008) indicate 0.7 as a coefficient that is good enough for reliability.

Table 4.2 indicates that credit policies scored highest on the reliability scale ( $\alpha=0.788$ ) topping credit scoring ( $\alpha=0.749$ ), credit risk monitoring ( $\alpha=0.731$ ), credit administration ( $\alpha = 0.727$ ) demonstrating that all the variables passed the reliability test as their values were more than 0.7, showing that the questionnaires were reliable for the collection of data (Mugenda & Mugenda, 2008).

**Table 4.2: Reliability Coefficients**

<b>Variables</b>	<b>Cronbach's Alpha</b>
Credit scoring	.749
Credit administration	.727
Credit policies	.788
Credit risk monitoring	.731

## **4.4 Descriptive Statistics**

### **4.4.1 Credit Scoring**

The research set out to determine what effect credit scoring had on financial performance among DTS. The respondents were therefore required to rate their responses on a likert scale where 5= Strongly Agree, 4= Agree, 3=Neutral, 2=Disagree, 1=Strongly Disagree. The study found that most respondents agreed that SACCOs analyzed the old credit files of prospective borrowers to determine how credit worthy they were as represented by a calculated mean of 4.2931 and SD of 0.4920. The study also noted that most of the respondents agreed that credit scores has helped in identifying areas of classification and prediction as indicated by a calculated mean of 4.1719 and SD of 0.0434. Additionally the respondents also strongly agreed that the use of credit scoring by SACCOs has been able to mitigate risks as this 4.6791 mean and SD of 0.8018 indicate. Further it was noted that SACCO's credit scores has assisted lenders to mitigate losses due to bad debts. Credit scoring has assisted the Sacco in financial decision making, shown by this high mean of 3.6532 and SD of 0.6309 which implies that the respondents agreed to the statement.

**Table 4.3: Credit Scoring**

<b>Credit scoring on financial performance</b>	<b>Mean</b>	<b>SD</b>
Level analysis of a person's credit files to represent the credit worthiness of that person	4.2931	0.4920
Risk posed by lending money evaluated by credit scores	3.9734	0.4972
Evaluate the potential risk posed by lending money	3.6511	0.6307
Credit scores has assisted lenders to mitigate losses due to bad debt	3.5366	0.8419
Credit scores has helped in identifying areas of classification and prediction	4.1719	0.0434
By use of credit scoring, the Sacco has been able to mitigate risks	4.6791	0.8018
Credit scoring has assisted the Sacco in financial decision makers.	3.6532	0.6309

The findings concurs with Nawaz and Munir (2012) who indicated when used properly, credit scores can help in the mitigation of loss of funds. Financial institutions are able to determine which clients need more staff for recovery processes. Again, the use of credit score facilitates long term planning. Financial institutions are able to know which clients to target and at what times if they believe that there will be a slowdown in the market due to some factors. This will be based on the credit scores of clients.

#### **4.4.2 Credit Administration**

The study also sought to find out the how credit administration affected financial performance among DTS. Results showed that most of the respondents strongly agreed that SACCOs had transparency and integrity in conducting their businesses as high mean

of 4.6449 and SD of 0.0802 show. The study also noted that most of the them strongly agreed that reasons for the acceptance or reject decision was clearly documented as shown by a mean of 4.1727 and SD of 0.6243. In addition the respondents also agreed that SACCOs eeffective administration system assists management to keep an eye on the loan portfolio as indicative of a 4.4211 mean and standard 0.4340 SD. Further the study established that Loan decisions are made in accordance to SACCO's loan policy as this 4.0383 mean and 0.5036 SD shows. Repondents further agreed that there was procedural guideline relating to credit scoring monitoring as represented by a calculated mean of 4.0494 and SD of 0.3016; they also agreed that SACCOs had a foundation upon which loan losses or provisioning methodology is built as a 3.9718 mean and SD of 1.0477 shows.

**Table 4.4: Credit administration**

<b>Credit administration</b>	<b>Mean</b>	<b>SD</b>
Prudent investors only take on an amount of risk they feel is appropriate for them	4.5133	0.5278
There is an investment strategy in place	4.1847	0.7342
The strategy helps helping the clients reach their financial goals	3.9366	0.5970
There is transparency and integrity	4.6449	0.0802
There is a foundation upon which loan losses or provisioning methodology is built	3.9718	1.0477
Effective administration system would help senior management to monitor the overall quality of the total credit portfolio	4.4211	0.4340
There is procedural guideline relating to credit scoring monitoring	4.0494	0.3016
Generating profitable loan that do not expose the lender to excessive amount of risk	3.0942	0.8021
Reason for the acceptance or reject decision should is clearly documented	4.1727	0.6243
Loan decisions are made in accordance to SACCOs loan policy	4.0383	0.5036

According to Pagano (2001), the management of credit risk is an essential function of financial institutions in value creation for both owners and creditors. The hypothesis of owners' wealth maximization has been linked to the importance of credit risk management by corporate finance literatures.

#### 4.4.3 Credit policies

How credit policies impacted financial performances of DTS was another objective of the study. It was found that Credit policy provides a frame work for the entire management practices, indicative of this 4.7442 mean and 0.4414 SD. It was further noted that policies have ensured operation's consistency and adherence to uniform sound practices as this 4.6744 mean and SD of 0.4741 shows. Additionally the participants concurred that credit policy has maximized the value of the Sacco, considering the calculated 4.3611 mean and a 0.4561 SD. However they were not decided when asked whether credit policy of the Sacco's had affected the capital adequacy, asset quality, management quality as represented by this 3.0279 mean and 1.4890 SD. Further they agreed using policies was a time saving activity as it prevented a particular issue from being continuously discussed. The mean calculated was 3.8333 and the SD was 0.9602. They concurred that the present credit policy manages accounts receivables as this computed mean of 3.6190 and a SD of 0.8915 indicates. Another point of agreement was that credit policies are according to the client's needs, indicative of this 3.5814 mean and 1.4991 SD.

**Table 4.5: Credit policies**

<b>Credit policies</b>	<b>Mean</b>	<b>SD</b>
The present credit policy manages accounts receivables	3.6190	0.8915
The credit policy has reduced high default risk	3.6429	0.4849
Policies save time by ensuring that the same issue is not discussed over and over again	3.8333	0.9602
Decisions are consistent and fair and that people in the same	3.8049	0.4012

circumstance get treated in the same manner		
Credit policy provides a frame work for the entire management practices	4.7442	0.4414
The policies have ensured operation's consistency and adherence to uniform sound practices.	4.6744	0.4741
The credit policy involved effective initiation analysis, credit monitoring and evaluation.	3.6744	1.4123
credit policy has maximized the value of the Sacco	4.3611	0.4561
There is increase in market share and retention of existing customers	4.3344	1.4123
The credit policy of the Sacco's has affected the capital adequacy, asset quality, management quality,	3.0279	1.4890
Fully articulated procedures provide detailed guidance for the day-to-day implementation	3.6905	0.4679
Credit policies are according to the client's needs	3.5814	1.4991

#### **4.4.5 Credit monitoring**

A fourth specific objective of the study was to establish how credit monitoring affected financial performance of DTS in Kenya. The respondents were therefore required to make indications by ticking against statement related to credit monitoring at the SACCOs. It was noted that most of the respondents agreed strongly that the credit risk monitoring practices used by these entities addressed all significant risk, as represented by a 4.6977 mean and SD of 0.46470.

**Table 4.6: Credit risk monitoring**

<b>Credit risk monitoring</b>	<b>Mean</b>	<b>SD</b>
Risk monitoring activities are supported by information systems	3.6977	0.4647
Institution's risk monitoring practices and reports address all of its material risks	4.6977	0.46470
Adequately documented and tested for reliability on an ongoing basis	3.6047	1.49471
Cultivating good loan customers and using credit-risk analysis to ensure that borrowers are credit worthy	3.8605	0.8506
The Sacco cannot earn profit because this one leads to the company's profitability	3.7442	0.7414
Credit policy has guided successful credit administration	4.1324	.5487

For a credit risk management system to be effective, not only must it be monitored, the structured must be reviewed constantly and reports be made to insure that risks are identified, assessed and management put into place controls that are needed. The practice of monitoring risks should assist these financial institutions to identify mistakes at controllable stages (Al-Tamimi & Al- Mazrooei, 2007).

## 4.5 Correlation Analysis

Pearson correlation was used to measure the degree of association amongst the variables under consideration (dependent and independent). The range of this correlation is from -1 to +1. Where the value is negative is an indication of a negative correlation but the opposite is true for positive values. The coefficient being  $<0.3$  indicates weak correlation,  $>0.3 < 0.5$  shows moderate correlation and  $>0.5$  indicates strong correlation. The Pearson correlation analysis and multiple regression model were the basis for analyzing the data, and it took the form:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

Where: Y = Financial Performance

X1 = Credit scoring

X2 = Credit administration

X3 = Credit policies

X4 = Credit risk monitoring

X5 = Size

$\beta_0$  = Constant

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$  = Regression coefficients or change included in Y by each X value

$\epsilon$  = error term

**Table 4.7 Correlation Coefficients**

	<b>Financial Performance</b>	<b>Credit scoring</b>	<b>Credit administration</b>	<b>Credit policies</b>	<b>Credit risk monitoring</b>	<b>Size</b>
Financial Performance	1					
Credit scoring	0.672	1				
Credit administration	0.579	0.551	1			
Credit policies	0.713	0.691	0.711	1		
Credit risk monitoring	.611	0.324	0.614	0.713	1	
Size	.599	.561	.547	.672	.571	1

\*. Correlation is significant at the 0.05 level (1-tailed).

As indicated by the above figure, all the variables showed a positive correlation, with credit policies being the strongest (Pearson correlation coefficient =.713; P value 0.000) influence on financial performance. In addition Credit scoring, Credit administration, Credit risk monitoring and Size are positively correlated to financial performance (Pearson correlation coefficient =.672, .579, .611and .611). The correlation matrix implies that the independent variables are very crucial determinants of financial performance as shown by their fairly strong and positive relationship with the dependent variable; financial performance.

#### **4.6 Regression Analysis**

A multiple regression analysis was carried out to test the relationship between the

variables. The researcher used SPSS V 21 to code, enter and calculate the measurements of the multiple regressions for the study. Coefficient of determination is used to show how any alteration in the independent variables (credit scoring, credit administration, credit policies ,credit risk monitoring and size) affect change the dependent variable ( financial performance).

#### 4.6.1 Model Summary

Regression model is used here to describe how the mean of the dependent variable changes with changing conditions. Regression Analysis was carried out for focus on credit scoring, credit administration, credit policies, credit risk monitoring, size and financial performance. To test for the relationship that these independent variables have on financial performance, the study did the multiple regression analysis.

**Table 4.8: Model Summary**

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
<b>1</b>	0.937	0.878	0.789	0.5273

87.8% of the financial performance was explained by scoring, credit administration, credit policies, credit risk monitoring and size as  $R^2$  shows, indicating that there are other variables that were not considered which accounts for 12.2% of the financial performance. This implies that these variables are very significant and therefore need to be

considered in any effort to boost financial performance of SACCOs in Kenya. These variables are considered as critical determinants of financial performance by the study.

**Table 4.9: ANOVA**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2.534	2	1.267	9.45	.017 <sup>a</sup>
Residual	9.307	40	2.327		
Total	3.465	42			

**NB:** F-critical Value 88.33 (statistically significant if the F-value is less than 88.33: from table of F-values).

- a. Predictors: (Constant),** Credit scoring, Credit administration, Credit policies, Credit risk monitoring and Size.

The significance value is 0.0179 below the 0.05 threshold, meaning that statistically, the model is significant in explaining or predicting how credit scoring, credit administration, credit policies, credit risk monitoring and size influence the financial performance of SACCOs. At 5% level of significance, the F critical was 3.23. Since F calculated is greater than the F critical (value = 9.475), it can be safely established that the model was significant.

The study ran the procedure of obtaining the coefficients, with results as seen in the below figure.

**Table 4.10: Coefficient Results**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	1.147	1.2235		1.615	0.367
	Credit scoring	0.752	0.1032	0.152	4.223	.0192
	Credit administration	0.487	0.3425	0.054	3.724	.0269
	Credit policies	0.545	0.2178	0.116	3.936	.0251
	Credit risk monitoring	0.439	0.1937	0.263	3.247	.0454
	Size	0.534	0.1894	0.255	3.232	.0548

To determine the relationship between financial performance and the five other variables, a multiple regression analysis was carried out. Based upon the code generated by SPSS as seen above, the equation ( $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5 X_5 + \epsilon$ ) becomes:

$$Y = 1.147 + 0.752X_1 + 0.487X_2 + 0.545X_3 + 0.439X_4 + 0.534X_5$$

Based upon the established regression equation, considering all factors (credit scoring, credit administration, credit policies, credit risk monitoring and size) constant at zero was

1.147. Findings from the analyzed data shows that if the rest of the other independent variables stand at zero, an increase in credit scoring of one unit shall result in a 0.752 increment in financial performance, making it the highest contributor. The same increase in credit administration of one unit will result in a 0.487 increment in financial performance. When credit policies increase by one unit, it leads to a 0.545 jump in the dependent variable, whereas the same amount of increase in Credit risk monitoring amounts to 0.439, the smallest increment in financial performance. One unit increased in the size of the SACCOs amounts to 0.534 improvement in financial performance. At confidence level of 95% and significance level of 5%, the following significance levels were calculated, Credit scoring 0.0192, Credit administration 0.0269, Credit policies 0.0251, credit risk monitoring 0.0454 and size of the SACCOs .0548, hence the most significant factor is Credit scoring.

#### **4.7 Discussion of Research Findings**

The study aimed to establish what effect credit risk management practices (credit monitoring, credit scoring, credit administration and credit policies) had on the financial performance of DTS in Kenya.

The study found that respondents agreed that SACCOs use credit scores to evaluate the potential risk posed by lending money as this 3.9734 mean and SD of 0.4972 show, this was supported by Nawaz and Munir (2012), who indicated when used properly, credit scores can help in the mitigation of loss of funds.

The findings also reveal that, in order to maintain a high level of financial performance, SACCOs should appropriately apply risk management practices. It was noted that most of the respondents agreed strongly that the credit risk monitoring practices used by these entities addressed all significant risk, as represented by a 4.6977 mean and SD of 0.46470.

Regarding the cultivating of good loan customers and using credit-risk analysis to ensure that borrowers were credit worthy as represented by a computed mean of 3.8605 and SD of 0.8506, all the respondents were in agreement.

To determine the relationship between financial performance and the five other variables, the regression analysis was used. Findings revealed that an increase in credit scoring of one unit shall result in a 0.752 increment in financial performance, making it the highest contributor. The same increase in credit administration of one unit will result in a 0.487 increment in financial performance. When credit policies increase by one unit, it leads to a 0.545 jump in the dependent variable, whereas the same amount of increase in Credit risk monitoring amounts to 0.439, the smallest increment in financial performance. One unit increased in the size of the SACCOs amounts to 0.534 improvement in financial performance. At confidence level of 95% and significance level of 5%, the following significance levels were calculated, Credit scoring 0.0192, Credit administration 0.0269, Credit policies 0.0251, credit risk monitoring 0.0454 and size of the SACCOs .0548, hence the most significant factor is Credit scoring.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

The chapter summarizes the research findings as presented in the preceding chapter above. The conclusion drawn from the findings are also presented in this chapter. Besides, the chapter presents recommendations and areas for research to be made further.

#### **5.2 Summary of findings**

The general objective of this study was to determine the effect of credit risk management practices on financial performance among DTS in Kenya. The respondents were therefore required to rate their responses on a likert scale where 5= Strongly Agree, 4= Agree, 3=Neutral, 2=Disagree, 1=Strongly Disagree. The study found that most respondents agreed that SACCOs analyzed the previous credit records of a prospective borrower to determine how credit worthy they are. The study also noted that most of the respondents agreed that credit scores has helped in identifying areas of classification and prediction. Additionally the respondents also strongly agreed that use of credit scoring SACCOs has been able to mitigate risks. Further it was noted that SACCO's credit scores has assisted lenders to mitigate losses due to bad debts. Credit scoring has assisted the Sacco in financial decision makers as indicated by a high mean which implies that the respondents agreed to the statement.

The study also sought to find out the effect of credit administration on financial performance among deposit taking SACCOs. The study found that most of the respondents strongly agreed that SACCOs had transparency and integrity in conducting their businesses. The study also noted that most of the respondents strongly agreed that rejection and or acceptance decisions were documented plainly. In addition the respondents also agreed that sacs effective administration system aided the lending entity's management to observe the entire loan portfolio and take necessary actions where need arises.. Further the study established that loan decisions are made in accordance to SACCO's loan policy. The repondents further agreed that there was procedural guideline relating to credit scoring monitoring. They also agreed that saccos had a foundation upon which loan losses or provisioning methodology is built.

The study further sought to establish the effects of credit policies on financial performance among deposit taking SACCOs. It was found that credit policy provides a frame work for the entire management practices. It was further noted that policies have ensured operation's consistency and adherence to uniform sound practices. Additionally the respondents agreed that credit policy has maximized the value of the Sacco. However the respondents were not decided when asked whether credit policy of the Sacco's had affected the capital adequacy, asset quality, and management quality. Further the respondents agreed that were time-saving by preventing a particular topic being discussed every time. They also agreed that the present credit policy manages accounts receivables. Furthermore the respondents agreed that credit policies are according to the client's needs.

The study further sought to assess the effects of credit risk monitoring on financial performance among deposit taking SACCOs. The respondents were therefore required to make indicate by ticking against statement related to credit monitoring at the SACCOs. It was noted that most of the respondents agreed strongly that all risks of significance were addressed by the risk monitoring practices of the entities.

### **5.3 Conclusion**

Most SACCOs in Kenya have a loan risk management policy in place. This policy is very crucial in providing guidelines on how to manage the various risks these organizations encounter in their lending activities. Formulation of the credit policy is largely done by members of the organizations and the regulation bodies with moderate involvement of employees and the director. The main reason why risk identification is important in SACCOs is to enable them practice risk management in the entire organization thus promoting effective risk management practices.

From the findings, the study concludes that SACCOs need the management of credit risk to be effective to prevent it from failing in its obligation and meeting its objective, minimize loan defaulters, cash loss and ensures the organization performs better increasing the return on assets and helping the organization in attaining maximum financial returns. The study further concludes that SACCOs consider risk identification process in credit risk management as essential in optimizing financial performance.

## **5.4 Recommendation**

With reference to the findings from this study, the researcher recommends that SACCOs should use the existing credit policy as the primary document for formulating a new credit policy. It will also be important if the SACCOs can also consider using credit policy documents from other successful similar organizations as a benchmark for best practices.

SACCOs administration should also improve the contribution of employee teams through the provision of training in credit risk related areas and attracting employees who are already experts in the areas of credit risk identification and mitigation. The entities should also institute firm internal controls and procedures, and strict policies on adherence to these policies and procedures should be crafted and rigorously followed. This will ensure effective risk identification and appraisal is conducted prior to disbursement of funds to borrowers, mitigate the incidence of the credit risk and improve the likelihood of meeting the entity's objectives.

SACCOs have suffered credit losses through relaxed lending standards, unguaranteed credits, and the borrowers' perceptions. The study recommends that SACCOs should make a fairly accurate personality-morale profile assessment of prospective and current borrowers and guarantors; this will minimize credit risks by securing the borrower's guarantee.

From the finding and conclusions the study recommends that organizations should enhance credit risk management practices which include portfolio asset quality/portfolio management, SACCOs loan policy procedure, risk monitoring, risk analysis and assessment, credit scoring mechanism.

### **5.5 Limitations of the study**

Several limitations arose during the course of and after the study. One is that the findings from this study are applicable only to DTS in Kenya due to the unique nature of their establishment and composition. Also of importance is the fact to note that as situations in the overall economy are susceptible to change, the relevance of the information contained in the findings are just limited to the duration of this research.

### **5.6 Suggestions for Further Research**

This study should be compared with findings from commercial banks or Micro finance institutions in order to establish the similarities and differences that may be evident. This will assist the SACCOs to benchmark with other organizations.

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## APPENDICES

### APPENDIX I-QUESTIONNAIRE

#### SECTION A:

#### GENERAL INFORMATION

By the means of tick (√) kindly indicate an option that best describes you where appropriate. Also fill in the blanks where necessary.

1. Gender (a). Female   
(b). Male
  
2. Age Bracket  
a) 20 - 30 years   
b) 31 – 40 years   
c) 41 - 50 years   
d) 51-60   
d) 60 and above
  
3. Level of Education  
a) Secondary Education   
b) Diploma   
c) Bachelor's Degree   
d) Master's Degree

**SECTION B: MAIN ISSUES OF THE STUDY**

1. Please indicate your overall evaluation of all part B sections that applies to your organization by placing a check (√) mark in the relevant box below using the following scale;

2.

**5. Strongly Agree (SA) 4. Agree (A) 3. Neutral (N) 2. Disagree (D)**

**1. Strongly Disagree (SD)**

<b>Credit scoring on financial performance</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
Level analysis of a person's credit files to represent the credit worthiness of that person					
Credit scores to evaluate the potential risk posed by lending money					
Evaluate the potential risk posed by lending money					
Credit scores has assisted lenders to mitigate losses due to bad debt					
Credit scores has helped in identifying areas of classification and prediction					
By use of credit scoring, the Sacco has been able to mitigate risks					
Credit scoring has assisted the Sacco in financial decision makers.					

**Any other opinion.....**

<b>Credit administration</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
Prudent investors only take on an amount of risk they feel is appropriate for them					
There is an investment strategy in place					
The strategy helps helping the clients reach their financial goals					
There is transparency and integrity					
There is a foundation upon which loan losses or provisioning methodology is built					
Effective administration system would help senior management to monitor the overall quality of the total credit portfolio					
There is procedural guideline relating to credit scoring monitoring					
Generating profitable loan that do not expose the lender to excessive amount of risk					
Reason for the acceptance or reject decision should is clearly documented					
Loan decisions are made in accordance to Saccos loan policy					

**Any other opinion.....**

<b>Credit policies</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
The present credit policy manages accounts receivables					
The credit policy has reduced high default risk					
Policies save time by ensuring that the same issue is not discussed over and over again					
Decisions are consistent and fair and that people in the same circumstance get treated in the same manner					
Credit policy provides a frame work for the entire management practices					
The policies have ensured operation's consistency and adherence to uniform sound practices.					
The credit policy involved effective initiation analysis, credit monitoring and evaluation.					
credit policy has maximized the value of the Sacco					
There is increase in market share and retention of existing customers					
The credit policy of the Saccos has affected the capital adequacy, asset quality, management quality,					
Fully articulated procedures provide detailed guidance for the day-to-day implementation					
Credit policies are according to the client's needs					

**Any other opinion.....**

<b>Credit risk monitoring</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
Risk monitoring activities are supported by information systems					
Institution's risk monitoring practices and reports address all of its material risks					
Adequately documented and tested for reliability on an ongoing basis					
Cultivating good loan customers and using credit-risk analysis to ensure that borrowers are credit worthy					
The Sacco cannot earn profit because this one leads to the company's profitability					
Credit policy has guided successful credit administration					

**Any other opinion.....**

**APPENDIX-I**  
**LIST OF SACCO SOCIETIES LICENSED TO UNDERTAKE**  
**DEPOSIT-TAKING SACCO BUSINESS IN KENYA FOR THE**  
**FINANCIAL YEAR ENDING DECEMBER 2016**

1. 2NK Sacco Society Ltd
2. Afya Sacco Society Ltd
3. Agro-Chem Sacco Society Ltd
4. All Churches Sacco Society Ltd
5. Ardhi Sacco Society Ltd
6. Asili Sacco Society Ltd
7. Bandari Sacco Society Ltd
8. Baraka Sacco Society Ltd
9. Baraton University Sacco Society Ltd
10. Biashara Sacco Society Ltd
11. Bingwa Sacco Society Ltd
12. Boresha Sacco Society Ltd
13. Capital Sacco Society Ltd
14. Centenary Sacco Society Ltd
15. Chai Sacco Society Ltd
16. Chuna Sacco Society Ltd
17. Cosmopolitan Sacco Society Ltd
18. County Sacco Society Ltd
19. Daima Sacco Society Ltd
20. Dhabiti Sacco Society Ltd
21. Dimkes Sacco Society Ltd
22. Dumisha Sacco Society Ltd
23. Egerton Sacco Society Ltd
24. Elgon Teachers Sacco Society Ltd
25. Elimu Sacco Society Ltd P.O Box
26. Enea Sacco Society Ltd
27. Faridi Sacco Society Ltd
28. Fariji Sacco Society Ltd
29. Fortune Sacco Society Ltd
30. Fundilima Sacco Society Ltd
31. Gastameco Sacco Society Ltd
32. Githunguri Dairy & Community Sacco Society Ltd
33. Goodway Sacco Society Ltd
34. Gusii Mwalimu Sacco Society Ltd
35. Harambee Sacco Society Ltd
36. Hazina Sacco Society Ltd

37. Ig Sacco Society Ltd
38. Ilkisonko Sacco Society Ltd
39. Imarika Sacco Society Ltd
40. Imarisha Sacco Society Ltd
41. Imenti Sacco Society Ltd
42. Jacaranda Sacco Society Ltd
43. Jamii Sacco Society Ltd
44. Jitegemee Sacco Society Ltd
45. Jumuika Sacco Society Ltd
46. Kaimosi Sacco Society Ltd
47. Kathera Rural Sacco Society Ltd
48. Kenpipe Sacco Society Ltd
49. Kenversity Sacco Society Ltd
50. Kenya Achievas Sacco Society Ltd
51. Kenya Bankers Sacco Society Ltd
52. Kenya Cannery Sacco Society Ltd
53. Kenya Highlands Sacco Society Ltd
54. Kenya Midland Sacco Society Ltd
55. Kenya Police Sacco Society Ltd
56. Joinas Sacco Society Ltd
57. Kimbilio Daima Sacco Society Ltd
58. Kingdom Sacco Society Ltd
59. Kipsigis Edis Sacco Society Ltd
60. Kite Sacco Society Ltd
61. Kitui Teachers Sacco Society Ltd
62. Kmfri Sacco Society Ltd
63. Kolenge Tea Sacco Society Ltd
64. Konoin Sacco Society Ltd
65. Koru Sacco Society Ltd
66. Kwale Teachers Sacco Society Ltd
67. Kwetu Sacco Society Ltd
68. K-Unity Sacco Society Ltd
69. Lamu Teachers Sacco Society Ltd
70. Lainisha Sacco Society Ltd
71. Lengo Sacco Society Ltd
72. Mafanikio Sacco Society Ltd.
73. Magadi Sacco Society Ltd
74. Magereza Sacco Society Ltd.
75. Maisha Bora Sacco Society Ltd
76. Marsabit Teachers Sacco Society Ltd

77. Mentor Sacco Society Ltd
78. Metropolitan National Sacco Society Ltd
79. Miliki Sacco Society Ltd
80. Mmh Sacco Society Ltd.
81. Mombasa Port Sacco Society Ltd
82. Mudete Tea Growers Sacco Society Ltd
83. Ollin Sacco Society Ltd
84. Murata Sacco Society Ltd
85. Mwalimu National Sacco Society Ltd
86. Mwietheri Sacco Society Ltd
87. Mwingi Mwalimu Sacco Society Ltd
88. Muki Sacco Society Ltd
89. Mwito Sacco Society Ltd
90. Nacico Sacco Society Ltd
91. Nafaka Sacco Society Ltd
92. Nandi Farmers Sacco Society Ltd
93. Nanyuki Equator Sacco Society Ltd
94. Narok Teachers Sacco Society Ltd
95. Nassefu Sacco Society Ltd
96. Nation Sacco Society
97. Nawiri Sacco Society Ltd
98. Ndege Chai Sacco Society Ltd
99. Ndosha Sacco Society Ltd
100. Ng'arisha Sacco Society Ltd
101. Noble Sacco Society Ltd
102. Nrs Sacco Society Ltd
103. Nufaika Sacco Society Ltd
104. Nyahururu Umoja Sacco Society Ltd
105. Nyala Vision Sacco Society Ltd.
106. Nyambene Arimi Sacco Society Ltd
107. Nyati Sacco Society
108. New Forties Sacco Society Ltd
109. Orient Sacco Society Ltd
110. Patnas Sacco Society Ltd
111. Prime Time Sacco
112. Puan Sacco Society Ltd
113. Qwetu Sacco Society Ltd
114. Rachuonyo Teachers Sacco Society Ltd
115. Safaricom Sacco Society Ltd.
116. Sheria Sacco Society Ltd

117. Shirika Sacco Society Ltd
118. Simba Chai Sacco Society Ltd
119. Siraji Sacco Society Ltd
120. Skyline Sacco Society Ltd
121. Smart Champions Sacco Society Ltd
122. Smart Life Sacco Society Ltd
123. Solution Sacco Society Ltd
124. Sotico Sacco Society Ltd
125. Southern Star Sacco Society Ltd
126. Shoppers Sacco Society Ltd
127. Stake Kenya Sacco Society Ltd
128. Stima Sacco Society Ltd
129. Sukari Sacco Society Ltd
130. Suba Teachers Sacco Society Ltd
131. Supa Sacco Society Ltd
132. Tai Sacco Society Ltd
133. Taifa Sacco Society Ltd
134. Taraji Sacco Society Ltd
135. Tembo Sacco Society Ltd
136. Tenhos Sacco Society Ltd
137. Thamani Sacco Society Ltd
138. Transcounties Sacco Society Ltd
139. Trans Nation Sacco Society Ltd
140. Times U Sacco Society Ltd
141. Tower Sacco Society Ltd
142. Trans- Elite County Sacco Society Ltd
143. Ufanisi Sacco Society Ltd P.O
144. Uchongaji Sacco Society Ltd
145. Ukristo Na Ufanisi Wa Angalicana Sacco Society Ltd
146. Ukulima Saco Society Ltd
147. Unaitas Sacco Society Ltd
148. Uni-County Sacco Society Ltd
149. United Nations Sacco Society Ltd
150. Unison Sacco Society Ltd
151. Universal Traders Sacco Society Ltd
152. Vihiga County Farmers Sacco Society Ltd
153. Vision Point Sacco Society Ltd
154. Vision Africa Sacco Society Ltd
155. Wakenya Pamoja Sacco Society Ltd
156. Wakulima Commercial Sacco Society Ltd

157. Wanaanga Sacco Society Ltd
158. Wananchi Sacco Society Ltd
159. Wanandege Sacco Society Ltd
160. Washa Sacco Society Ltd
161. Waumini Sacco Society Ltd
162. Wevarsity Sacco Society Ltd
163. Winas Sacco Society Ltd
164. Yetu Sacco Society Ltd

**Source-** The Sacco Societies Regulatory Authority (**SASRA**) official website-  
[www.sasra.go.ke](http://www.sasra.go.ke)