

**THE EFFECT OF LENDING ON THE FINANCIAL PERFORMANCE OF
SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN NAIROBI
COUNTY**

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DECLARATION

I declare that this is my original work and has not been presented in any other University or College for Examination or Academic purposes.

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DEDICATION

The research is dedicated first to my dear parents, who were a great source of inspiration to my education and without their foresight, sacrifice and support I would not have gone this far. Secondly, to my beloved husband who stood by me all times and our beloved daughter Keisha whose encouragement kept me going up to the end.

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With these acknowledgments, it would be impossible not to remember those who in one way or another, directly or indirectly, have played a role in the realization of this research project. Let me, therefore, thank them all equally.

First, I am indebted to the all-powerful GOD for all the blessings he showered on me and for being with me throughout the study. I am deeply obliged to my supervisor for his exemplary guidance and support without whose help; this project would not have been a success.

Finally, yet importantly, I take this opportunity to express my deep gratitude to the lasting memory of my loving family, and friends who are a constant source of motivation and for their never ending support and encouragement during this project.

ABSTRACT

As development takes place, one question that arises is the extent to which credit can be offered to the rural poor to facilitate their taking advantage of the developing entrepreneurial activities. Lending is the trust which allows one party to provide resources to another party where that second party does not reimburse the first party immediately (thereby generating a debt), but instead arranges either to repay or return those resources (or other materials of equal value) at a later date. Descriptive design was used in the study. Descriptive research was used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation. This design aimed at determining the effect of lending on SACCOs' financial performance.

The researcher used secondary data. Secondary data was collected from the Sacco financial statements and policies. Literature was reviewed using secondary data sources including other dissertations, journals, Sacco's financial reports, SACCO's Act, Sacco supervision annual report, internet, research projects and information from the university library. Data was collected from target population which shall comprise of 34 licensed SACCOs in Nairobi County as per Sacco supervision annual report 2012 by Sacco Regulatory Authority (SASRA). Descriptive analysis involving: frequencies, percentages, means, modes, medians, standard deviation, variances will then be used. The study used a multiple linear regression analysis on secondary data. The following variables were entered in the regression: profitability, lending volume, loan default, lending interest rate, total deposit value. The study also found that loan default negatively impact on the financial performance of SACCO in Nairobi county.

The finding indicated that average interest rates for loans for the past five financial years from 2009 to 2013 raised from 8.0514 to 13.011. This increase was gradual throughout the study period. Findings indicated that there was a negative relationship between the interest rates charged by the Sacco's. The upward adjustments of Sacco's interests on term loans are in order to cushion themselves of the regulatory effects. The study recommends that SASRA has great impact on the Sacco performance in terms of outreach and sustainability. Most Sacco's improvement on performance both in membership, portfolio and loan cycle and general efficiency was attributed to a number of factors ranging from increased membership, high efficiency, high demand and quick recoveries; which was attributed to SASRA regulatory framework. Sound default Loan provision policies should be established by Sacco's. They should make adequate loan provisions to promote safety of funds. This will ensure that loan assets are not overstated and recovery simplified within the regulation frame work. SACCOs should adopt competition that requires effective risk management, effective savings mobilization strategies on members' savings mobilization and see the need to develop marketing and new products/services strategies to make members to benefit from competitive interest rates on loans borrowed and to provide a wider selection of financial products/services.

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LIST OF ABBREVIATIONS

EBIT -Earnings Before Interest and Tax

FOSA -Front Office Service Activity

HID -Human Integrated development

IT -Information Technology

KIFISACCO - Kibaigwa Financial Savings and Credit Cooperative Society

KREP -Kenya Rural Enterprise Programme

MFI - Micro Finance Institution

NGO -Non-Governmental Organization

NPL - Non Performing Loan

SACCOs - Savings and Credit Co-Operatives

SPSS - Statistical Package for Social Scientists

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The provision of credit has increasingly been regarded as an important tool for raising the incomes of rural populations, mainly by mobilizing resources to more productive uses. As development takes place, one question that arises is the extent to which credit can be offered to the rural poor to facilitate their taking advantage of the developing entrepreneurial activities. Lending is the trust which allows one party to provide resources to another party where that second party does not reimburse the first party immediately (thereby generating a debt), but instead arranges either to repay or return those resources (or other materials of equal value) at a later date (Gisemba, 2010).

Commercial banks and other formal institutions fail to cater for the credit needs of smallholders, however, mainly due to their lending terms and conditions. It is generally the rules and regulations of the formal financial institutions that have created the myth that the poor are not bankable, and since they can't afford the required collateral, they are considered creditworthy (Adera, 1995). Hence despite efforts to overcome the widespread lack of financial services, especially among smallholders in developing countries, and the expansion of credit in the rural areas of these countries, the majority still have only limited access to bank services to support their private initiatives (Braverman and Guasch, 1986).

In the recent past, there has been an increased popularity in the banking industry has led SACCOs to behave more competitively. Competition varies with the number of competitors and the respective kind of products offered in the market which forms the basis for this research. SACCOs

need to have a well-recognized and visible symbol. A symbol is intended to identify the products of either one seller or a group of sellers, and to differentiate those products from those of competitors (Aaker 1991; Stanton 2010; Kotler 1996).

1.1.1 Lending

Efficient lending puts into consideration risk factors, economic goals and aspirations of the society and the needs of the lender. Experience from informal finance shows that the rural poor, especially women, often have greater access to credit facilities than to formal sources (Hossain, 1988; Schrieder and Cuevas, 1992; Adams, 1992). The same case has also been reported by surveys of credit markets in Kenya (Raikes, 1989; Alila, 1991; Daniels et al., 1995).

The lending policies used by the main credit institutions must ensure efficient and profitable use of credit funds, especially by farmers, and also result in a disparity between credit demand and supply (Atieno, 2010). This view is further supported by a 1995 survey by the Kenya Rural Enterprise Programme (KREP) showing that whereas credit is an important factor in enterprise expansion, it will most likely lead to enterprise contraction when not given in adequate amounts (Daniels et al., 1995). Hence, despite the existence of a sophisticated financial system, it has not guaranteed the access to credit by small-scale enterprises.

The work by Stiglitz and Weiss (2009) marks the beginning of attempts at explanations of credit rationing in credit markets. In this explanation, interest rates charged by a credit institution are seen as having a dual role of sorting potential borrowers (leading to adverse selection), and affecting the actions of borrowers (leading to the incentive effect). Interest rates thus affect the nature of the transaction and do not necessarily clear the market.

Raising interest rates or collateral in the face of excess demand is not always profitable, and banks will deny loans to certain borrowers. The result is credit rationing in credit markets, which refers to two situations: (1) Among loan applicants who appear to be identical, some receive and others do not, with those who don't having no chance of receiving a loan even if they offered to pay higher interest rates. (2) There are identifiable groups of people who at a given supply of credit, are unable to obtain credit at any interest rate, but with a larger supply, they would.

Besley (2004), following this line of argument, analyses the rationale for interventions in rural credit markets in the presence of market failure. Since credit markets are characterized by imperfect information, and high costs of contract enforcement, an efficiency measure as exists in a perfectly competitive market will not be an accurate measure against which to define market Failure. These problems lead to credit rationing in credit markets, adverse selection and moral hazard.

Adverse selection arises because in the absence of perfect information about the borrower, an increase in interest rates encourages borrowers with the most risky projects, and hence least likely to repay, to borrow, while those with the least risky projects cease to borrow. Interest rates will thus play the allocative role of equating demand and supply for loanable funds, and will also affect the average quality of lenders' loan portfolios. Lenders will fix the interest rates data lower level and ration access to credit. Imperfect information is therefore important in explaining the existence of credit rationing in rural credit markets. Moral hazard occurs basically because projects have identical mean returns but different degrees of risk, and lenders are unable to discern the borrowers' actions (Stiglitz and Weiss, 2009).

1.1.2 Financial Performance

Financial performance of financial institutions must be matched by efficiency gains in the quality of services offered to the customers and the economy in general. It has been argued that the large differential between deposit and lending rates is an indication of the lack of sufficient competition for savings. Despite the liberalization of interest rates in 1991, nominal interest rates have shown minimal increase, resulting in negative real interest rates, and a widening of interest rate spread, indicating inefficiency in the system. Bank charges for services rendered also make the cost of banking prohibitive to a majority of the population. The high profitability in the banking sector has not triggered entry by new competitors as would be expected. These points to the existence of barriers to entry in the market. According to the 1997-2002 development plan, there is need to introduce regulatory measures to check oligopolistic tendencies, which restrict entry and efficiency in the banking sector.

As in many other countries in sub-Saharan Africa, the performance of formal financial institutions and credit programmes in Kenya in terms of alleviating the financial constraints of the smallholder sector has met a lot of criticism. The criterion of creditworthiness, delays in loan processing and disbursement, and the government approach to preferential interest rates, resulting in non-price credit rationing, have limited the amount of credit available to smallholders and the efficiency with which the available funds are used (Atieno, 2010). This can be seen as an indication of the general inadequacy of the formal credit institutions in meeting the existing credit demand in the country. Bottlenecks in the capacity of the existing institutions to deliver credit are also reflected in the existing unsatisfied demand (Aleke Dondo, 2010). Viewed against its ability to meet the particular credit needs of the different types of rural enterprise activities, Kenya's financial system displays a deficiency in the range of financial instruments and lack of coordination between different

financial institutions. This is consistent with the argument that credit markets in Africa are characterized by inability to satisfy existing demand, which for the informal market is explained by the high transaction costs and default risks.

1.1.3 Effect of Lending on Financial Performance

The link between loan lending and financial performance of lending institutions has seen imperfect information inherent in credit markets. Adverse selection occurs because lenders would like to identify the borrowers most likely to repay their loans since the banks' expected returns depend on the probability of repayment. In an attempt to identify borrowers with high probability of repayment, banks are likely to use the interest rates that an individual is willing to pay as a screening device. However, borrowers willing to pay high interest rates may on average be worse risks; thus as the interest rate increases, the riskiness of those who borrow also increases, reducing the bank's profitability. The incentive effect occurs because as the interest rate and other terms of the contract change, the behaviour of borrowers is likely to change since it affects the returns on their projects. Stiglitz and Weiss (2009) further show that higher interest rates induce firms to undertake projects with lower probability of success but higher payoffs when they succeed (leading to the problem of moral hazard).

On the one hand SACCO managers need to reduce the risk of loan default because the institutions financial viability is weakened by the loss of principal and interest, yet on the other hand Sacco's operate under objectives of maximizing benefits to members which include the social role of providing loans to help members achieve their standard of living goals. This social roles conflict with financial viability of Saccos' if managers become less stringent in the lending practices to assess and monitor the credit risk of member borrowers (Mwakajumilo (2011). Haki kazi (2006),

Bibby (2006) and Mwakajumilo (2011) stressed that the problems of non-performing loans is caused by poor management and lack of effective loans follow-up by the SACCOS management. Karumuna and Akyoo (2011) revealed that Kibaigwa Financial Services and Credit Cooperative Society (KIFISACCO) in Dodoma region had outstanding loans of Tshs 762,500,000 (equivalent to \$610,000) in 2009 due to management compassion in loans follow-up. Therefore this study was done to assess the influence of SACCOS' variables on NPL.

1.1.4 Sacco Sector in Nairobi County

The original legal framework for SACCOs in Kenya was provided by the Cooperative Act of 1966. This Act gave the State extended powers to get involved in the day to day management of co-operatives. Following economic liberalization, the Co-operative Societies Act was revised in 1997 and went into effect on June 1st 1998. The revised Act envisaged government giving up control of cooperatives, thereby enable more autonomy to members. According to the Cooperative Act, operations of a cooperative are defined by their bylaws which are filed with the Ministry of Cooperatives (The Cooperative Societies Rules 2004).

There is a specialized legal, regulatory and supervisory framework for SACCOs known as the SACCO Societies regulatory authority (SASRA). All SACCOs were expected to register with it by June 2011. Savings and Credit Co-operatives (SACCOs), one of the several types of co-operatives are unique, legal, member-based Micro-Finance Institutions (MFIs) and unlike many other Micro-Finance Institutions, SACCO owners are also the users of the service that the SACCOs offer.

The SACCOs have gained popularity as accelerators of development and recently the government passed a law that all public service vehicles be registered to a Sacco. (National Development Plan,

2008). Being socio-economic institutions, if well managed and organized, the SACCOs can contribute favorably to bringing about Human Integrated Development (HID), a fact stated by Syed (1991). He further noted that the SACCOs are a tested instrument for promoting integrated development through a self-help scheme that makes man a total human being (Syed, 1991).

SACCOs therefore offers similar products like banks and most of them were formed long time ago but their growth in terms of customer base and market share as well as expansion level is not something to be proud of compared to commercial banks and other financial institutions. Their performance and growth in those terms also varies among different SACCOs.

1.2 Research Problem

SACCOs play a significant role in the provision of financial services to the target groups. They provide savings and credit and investment opportunities to individuals, institutions and group members. This is emphasized by Magill (2010:140) thus; they perform an active financial intermediation function, particularly mediating from urban and semi-urban to rural areas, and between net savers and net borrowers while ensuring that loan resources remain in the communities from which the savings were mobilized.

Most SACCOs have however diversified their services and products to target not only members within its common bond but also to everyone with different economic activity thereby opening the common bond. This has been caused by the current stiff competition arising from other financial institutions that have come up with more friendly financial products to the same members unlike there before. Despite the stiff competition SACCOs are still operating due to consumers' different perspectives. Indeed (Schiffman and Kanuk et al 1996) contend that although two individuals may be subject to the same stimuli under apparently the same conditions, the way they recognize them,

select them, organize them, and interpret them is a highly individual process based on each person's own needs, values and expectations.

However, SACCOs' capacity to increase outreach in quest for greater impact creation in the communities has been derailed, simply because, there are insufficient loanable funds due to low levels of savings as borrowers require well over and above of what they save. The products offered by SACCOs include Shares, Savings, Emergency Loans, Normal Loans, Development loan, Life and Loan Insurance, Fixed deposits, Christmas saving, Educational savings, Housing loans, and Funeral insurance among others depending on the type of SACCO. SACCO supervision annual report 2012, the total assets of the licensed SACCOs stood at Ksh202 billion which was a 14% growth from the previous year, funded mainly by member deposits which increased 21% to Ksh146 billion. Based on this, a total Ksh29 billion was disbursed as loans and advances which was 23% increase and accounted for 76% of the total assets growth.

Empirical studies by Trà, and Lensink, (2012) revealed that informal lenders face a higher default risk than formal lenders and socio cohesion influence loans default negatively in Vietnam while Gómez and Santor (2008) found out that loans repayment was higher for group than individual borrowers and socio cohesion influenced loans default negatively in Nova Scotia-Canada. Duy (2013) found out that farmers have higher repayment performance than non-farmers in Vietnam while Addisu (2006) noted that the Government owned and NGOs microfinance institutions were found to have high default rate in Ethiopia.

Al- Mamun *et al* (2011) revealed that more than 50% of the cooperative members fail to repay their loans because they misallocated their credits in Malyasia. Addisu (2006) found out that lack

of risks mitigation strategies for borrowers lead to high loans default risks for informal sector borrowers in Ethiopia.

Locally, Warue (2012) found out that age and of the business and diversion of funds by borrowers and MFIs corporate governance style, loan process, and recovery methods influenced the loans delinquency for MFIs in Kenya. Onchangwa et al (2013) asserted that misallocation of loans in non-production activities by SACCOS' members reduced their investments and this posed the high probability of the loans default in Kenya. No known study has therefore established the effect of lending on financial performance in selected Sacco in Nairobi, County.

This study therefore sought to provide answers to the question; what is the effect of lending on financial performance in selected Saccos in Nairobi County?

1.3 Objective of the Study

To establish the effect of lending on financial performance of selected Saccos in Nairobi, County.

1.4 Value of the Study

The findings of this study were significant to the following stakeholders.

They included one, the researcher whose main purpose is to add the already existing knowledge in the University of Nairobi. The findings of this study will enrich existing knowledge and hence will be of interest to both researchers and academicians who seek to explore and carry out further investigations. It will provide a basis for further research.

Second, the management of the SACCOs in case they implement the recommendations, which will improve on their products, service delivery and strategic marketing. The findings of this study will be useful to SACCOs in evaluating how effective their approach to managing assets. This will enable them to identify the gaps in their management of their wealth and adjust accordingly.

The third beneficiaries were the employees of the SACCOs who were guaranteed of work continuity and even good remuneration after their business volume increases due to strategic marketing.

The final beneficiary was SACCO competitors who can use the information obtained to take advantage on the weak areas of the SACCOs. They can also use the same to learn new skills and concepts at no cost and implement them in their organizations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter will review and discuss the literature and highlight the empirical studies to the development of an instrument that explains the link between variables lending and financial performance. It will discuss the theories used for the study, lending, and finally discuss the empirical literature on financial performance.

Literature is reviewed with a view of establishing what exists in relation to the area of study and to identify gaps that exist, hence justify the need to carry out the study so as to fill in the knowledge gaps. It seeks to identify, evaluate and present all relevant information from text books, government publications, reports from other researchers, journals and the internet. It also tries to capture the mind of other researchers in relation to the variables.

2.2 Theoretical Review

An increasing body of analytical work has attempted to explain the functioning of credit markets using new theoretical developments. Challenging the paradigm of competitive equilibrium, they have explored the implications of incomplete markets and imperfect information for the functioning of credit markets in developing countries. These provide a new theoretical foundation for policy intervention. Most of this body of literature has followed from the pioneering work of Stiglitz and Weiss (2009).

2.2.1 Gambler's Ruin Theory

Gambler's ruin problem developed based on a letter from Blaise Pascal to Pierre Fermat in 1656 (David, 1998). In context of the firm's failure, a firm would take the place of a gambler. The firm would continue to operate until its net worth erodes to zero, a point where the firm would be declared bankrupt. The theory assumes that the firm has some given amount of capital in cash, which would keep entering or exiting the firm on a random basis depending on the firm's operations.

In any given period, the firm would experience either positive or negative cashflows. Over a run of periods, there is one possible composite probability that cashflow was always negative. Such a situation would lead the firm to declare bankruptcy, as it has run out of cash. Hence, under this approach, the firm remains solvent as long as its net worth is greater than zero. This net worth is calculated from the liquidation value of the firm's stockholders' equity.

Wilcox (1971) set up a model where cash flow was with either positive or negative values, and the reserve is the value of book equity. One would then compute the probability of default given the cash flows. The "*distance to default*" in this theory is the sum of the book value of equity and the expected cash flows divided by the cash flow volatility. According to Wilcox (1971) the book value of equity is a distributable reserve, and cash flows either add to or drain from this reserve. In the case of a bankruptcy, the reserve is fully used up.

2.2.2 Cash Management Theory

Developed by Mao and Sarndal (1978), cash management theory deals with firms' liquidity. The theory posits that short-term management of corporate cash balances is a major concern of every firm. Cash or funds flow statements of the firms report this cash management function of

corporations, particularly from 1980s. An imbalance between cash inflows and outflows would mean failure of cash management function of the firm. Persistence of such an imbalance may cause financial distress to the firm and, hence, bankruptcy.

According to Laitinen and Laitinen (1999), cash management refers to the management of cash from the time it starts its transit to the firm until it leaves the firm in payments. Failure of the cash management can be defined as an imbalance between cash inflows and outflows. This leads to failure usually defined as the inability of the firm to pay its financial obligations as they mature. Traditionally, cash management behavior of a firm is described by different models of demand for money, e.g., the quantity theory of demand for money, which assumes that the demand for money does not differ from the demand for any funds in the firm. The most popular and simple approach to the demand for money in this framework is that followed by the inventory cash management approach, where demand for money by a firm is assumed to depend on the volume of transactions.

2.2.3 Transaction Cost Theory

Transaction cost approach to the theory of the firm was created by Coase (1937) in his article "The Problem of Social Cost" "In order to carry out a market transaction it is necessary to discover who it is that one wishes to deal with, to conduct negotiations leading up to a bargain, to draw up the contract, to undertake the inspection needed to make sure that the terms of the contract are being observed, and so on". More succinctly transaction costs are: Search and information costs, bargaining and decision costs, and policing and enforcement costs. The transaction cost can be conceptualized as a nonfinancial cost incurred in credit delivery by the borrower and the lender before, during and after the disbursement of loan.

The cost incurred by the lender include; cost of searching for funds to loan, cost of designing credit contracts, cost of screening borrowers, assessing project feasibility, cost of scrutinizing loan application, cost of providing credit training to staff and borrowers, and the cost of monitoring and putting into effect loan contracts. On the other hand, the borrowers may incur cost ranging from cost associated in screening group member (group borrowing), cost of forming a group, cost of negotiating with the lender, cost of filling paper work, transportation to and from the financial institution, cost of time spent on project appraisal and cost of attending meetings, Bhatt and Shui-Yan (1998). The parties involved in a project will determine the transaction cost rate. They have the sole responsibility to reduce the risk they may come across, Stiglitz (1990).

2.3 Determinants of Financial Performance of Credit Unions

The theory of credit risk has many similar characteristics with the theory of interest rates. Both practitioners in industry and the theorists in academia are enthusiastic about modeling the dynamics of the interest rate since the study on short rates by Vasicek (1977). It is believed that information sharing reduces risk in the financial industry by offering credit only to credit-worthy borrowers. The low rate of risk translates to low interest rates as risk is factored in interest rate. When interest rates are low, there is economic growth stimulation as more funds were available for investment.

Lending rates/ interest rates are one of the primary economic determinants of performance of any loans. An increase in interest rate weakens loan payment capacity of the borrower therefore non-performing loans and bad loans are positively correlated with the interest rates (Nkusu, 2011). As far as interest rate policy is concerned it plays very important role in NPLs growth rate in a country/economy, Hoque and Hossain (2008) examined this issue and according to them non-

performing loans are highly correlated with the high interest rates which enhances the debt burden of the borrowers and causes loan defaults.

Espinoza and Prasad (2010) examined the macroeconomic determinants of non-performing loans in the GCC banking system according to them high interest rates increases loan defaults but they did not find statistically significant relationship. Bloem and Gorter (2001) studied causes and treatment of NPLs, according to them frequent changes in the interest rate policy causes an increase in the bad loans.

Asari, et al. (2011) also found significant relationship between loan defaults and interest rates they also found that an increase in loan defaults also causes asset corrosion of banks and subsequently capital erosion. According to Dash and Kabra (2010) the banks with aggressive lending policies charging high interest rates from the borrowers incur greater non-performing loans. Collins and Wanjau (2011) also found interest rate as a primary factor boosting non-performing loans.

The role played by NPLs in triggering financial crises in Latin America, Sub-Saharan African, East Asia countries and lately sub-prime loans cannot be deemphasized. This has rekindled interest in investigating the factors responsible for financial exposure; as investigators believe that once the factors are clearly identified, then future occurrence may be easily prevented (Bibby, 2006). Haki kazi (2006), Bibby (2006) and Mwakajumilo (2011) stressed that the problems of non-performing loans is caused by poor management and lack of effective loans follow-up by the SACCOS management. Karumuna and Akyoo (2011) revealed that Kibaigwa Financial Services and Credit Cooperative Society (KIFISACCO) in Dodoma region had outstanding loans of Tshs 762,500,000 (equivalent to \$610,000) in 2009 due to management compassion in loans follow-up. Therefore this study was done to assess the influence of SACCOS' variables on NPL.

According to Sacco supervision annual report 2012, the overall non-performing loans for licensed Saccos dropped to 7.3% of the gross loan from a high of 9.7% in 2011 though still below industry standard of 5%. The government continued to support the sector through honoring its commitment to pay off the bad debts waiver with kshs 750 million paid out to 27 societies in 2011. This has left a remaining balance of kshs 2 billion as at December 2012. A total kshs 29 billion was also disbursed as loans and advances representing an increase of 23%. Total loans lending accounted for 76% of the total assets reinforcing the fact that Saccos core business is to mobilize savings lend to their members. The authority appreciates that the core business of a Sacco is to mobilize savings and provide credit, thus credit risk management remain one of the key pillar in compliance. It's appreciated by instituting good lending management process, a Sacco society stands a chance of thriving in performance and meeting member's demand. Their assessment of lending (loan) quality reveals a significant improvement in Sacco's loan book in 2012 compared to 2011 inspite of high interest rate in the market.

2.4 Empirical Studies

Although not much is known about the informal financial sector in the country, there is a consensus that it is an important source of finance to the small-scale entrepreneurs in the country (Aleke Dondo, 2010). Ouma (1991) found that 72% of the sample surveyed saved with and borrowed from informal sources. Whereas in the formal credit market only a selected few qualify for the predetermined loan portfolios, in the informal market the diversified credit needs of borrowers are better satisfied. The problems of formal financial institutions, especially security, loan processing, inadequate loans given, unclear procedures in loan disbursement and high interest rates, all underscore the importance of informal credit and the need to investigate the dynamics of its

operations, especially with respect to how these factors determine the access to and the use of credit facilities.

A 1995 survey of small and microenterprises found that up to 32.7% of the entrepreneurs surveyed mentioned lack of capital as their principal problem, while only about 10% had ever received credit (Daniels et al., 1995). Although causality cannot be inferred a priori from the relationship between credit and enterprise growth, it is an indicator of the importance of credit in enterprise development. The failure of specialized financial institutions to meet the credit needs of such enterprises has underlined the importance of a needs oriented financial system for rural development.

Accordingly, where default risk exists, with an upward sloping supply curve, lenders offer borrowers only a choice of points on the supply curve, and borrowers are restricted to these points. It is impossible to identify the loan demand schedule using the observed loan amounts since these only reflect the existing supply. The credit demand function can only be interpreted from the borrower's participation decision, i.e., the decision to borrow or not, and from which sector to borrow. Such a decision will depend on, among other things, the borrower's economic endowment and opportunities. The credit demand schedule identification problem therefore implies the existence of credit rationing (Elhiraika and Ahmed, 1998).

Conversely, Arrasen and Avoyidovu (2001) asserted that financial expenses, wages and portfolio quality mainly influenced financial performance while lending methodology, form of institution and location influenced the socio performance of SACCOs in Sub-Saharan Africa. Crombrughe et al (2008) linked the determination of interest rate and Sacco's performance. They recommended that MFIs in India can maintain the interest rate of 22% and become profitable if repayment of the

loan is made according to the contract. They also revealed that SACCOs in India do not cover costs because they were inefficient in loans processing. They insisted that increasing of loan size and the number of borrowers per loan officer can be a solution for improving efficiency and performance of SACCOs in India. Locally Ndebele (2008), studies on how the Kenyan banking sector is dominated by a few large firms, which focus mainly on short-term lending. Of the 56 commercial banks operating in the country, the largest four control 81% of the deposits. The short-term nature of their lending and their policies of concentrating on a small corporate clientele have implied indifference to small savers and borrowers. This has meant that they exclude a large number of potential borrowers and investors from their services.

Bond (2009) found out that large size of board reduced the performance of cooperatives in USA while McKee (2008) proved that outside investment help the cooperative to become more efficient. The study registered 50% of farm supply and grain marketing cooperatives which received at least 40% of net revenues from assets invested outside in North Dakota-USA between 2002 and 2005. The study suggested the relationship between net income, sales volume, profitability and total asset value. Conversely, Saleh (2012) revealed the positive association between the cooperative performance and self reliance ratio, annual sales and type of cooperative activities in Egypt.

Moria and Olomi (2012) established that low awareness and lack of confidence of SACCO's board's members caused inefficiency when performing their roles and this negatively influenced the SACCOs performance. They also revealed that females and local directors were the reason for superior financial and social performance of SACCOs in Tanzania and Kenya. These empirical literature reviews suggest that the literature on how MFI variables affect the loans default risks is missing. Fernández et al (2012) found out that determinants of margin in SACCOs in Spain are operating costs, solvency, risk, size, age, financial inclusion status, outreach (average loan balance

per borrower and percentage of women borrowers), donations, deposits, type of entity and profitability while Tehulu (2013) revealed that the determinants of SACCOs financial sustainability in East Africa are management inefficiency, portfolio at risk, loans intensity and size.

Makori, et al (2013) revealed that political interference, high investment in non-earning assets and inadequate managerial competencies hindered the profitability of SACCOS in Kenya. Mwau (2013) found out that 88.9% of the SACCOs in Kenya had received external funding and hence concluded that financing diversification positively affects the performance of SACCOS. Mosongo et al (2013) affirmed that high financial performance of the SACCOS depended on adopting institutional, product and process innovations respectively. Chahayo et al (2013) found out that financial shortage negatively affects the SACCOS' performance. They noted that the financial mismatch was caused by poor leadership, poor record keeping, outdated cooperative laws, lack of cash flow management and low interest loans. Similarly, Olando et al (2012) found out that growth of SACCOS' wealth depended on financial stewardship, capital structure and funds allocation strategy.

Olando et al (2013) narrated that the growth of SACCOS' wealth depended on loans management, institutional strengths and innovativeness of SACCO Products. Auka and Mwangi (2013) revealed that despite SACCOS were not effective and competitive in providing financial products and customer relations; large number of SACCOS' members took loans because they provided low-interest loans. Mwangi and Wanjau (2013) found out SACCOS contributed to the growth of capital, entrepreneurship and business management skills among youth in Kenya.

2.5 Summary of the Literature Review

Empirically, research on lending have, as presented in the empirical review, primarily focused on commercial banks and microfinance institutions. Besides, the previous studies have concentrated on other dimensions such as interest rates, non-performing loans and other management factors that only results to positive correlation for financial performance since demand for credit far outweighs the supply of potential demand into revealed demand. This study thus shall fill these theoretical conceptualization by also investigating farthest defaulter risk as recognized by effect of SACCO lending.

Moreover, this study sees a knowledge gap on the above literature whereby the empirical reviews also took place under different circumstances for instance there has been recent improvements in service delivery through improved technology, globalization and other factors which made it necessary to carry out this study. Furthermore, this study seek to test whether the lending coefficient for the financial performance of SACCOs has a strong relationship with the variables loan defaulters deposits, savings, credit advance, operating and self-sufficiency. This study therefore seeks to fill in this literature gap by establishing the effect of lending on financial performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter contains the research design, target population, the sample, research instruments and the methods that was used in data analysis. Methodology is the system of orderly procedures and rules applicable to research. The data collection sheet was used as the data collection instruments

3.2 Research Design

Descriptive design was used in the study. Descriptive research was used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation. Descriptive research design was developed to provide further insight into the research problem by describing the variables of interest. A descriptive study is concerned with determining the frequency with which something occurs (Bryman and Bell, 2003). This design was aimed at determining the effect of lending on SACCOs' financial performance.

3.3 Data Collection

The researcher used secondary data. Secondary data was collected from the Sacco financial statements and policies. Literature was reviewed using secondary data sources including other dissertations, journals, Sacco's financial reports, SACCO's Act, Sacco supervision annual report, internet, research projects and information from the university library.

Data was collected from target population which comprised of 34 licensed SACCOs in Nairobi County as per Sacco supervision annual report 2012 by Sacco Regulatory Authority (SASRA).

The study used census technique which involves studying the whole population (Mugenda and Mugenda, 2003). All the 34 SACCOs licensed by SASRA were selected as sampling units. The study used the data from the SACCOs financial statements for a period of 5 years, from year 2009-2013. This sample will, thus, be purposively taken. The researcher used data collection sheet as the instrument to collect data. The advantage of using the data collection sheet is that the data obtained is easy to process and analyze statistically.

3.4 Data Analysis

The data generated from the collection sheet was coded and entries made into Statistical Package for Social Science (SPSS version 17). Descriptive analysis involving: frequencies, percentages, means, modes, medians, standard deviation, variances were used.

3.4.1 Analytical Model

The study used a multiple linear regression analysis on secondary data. The following variables were entered in the regression: profitability, lending volume, loan default, lending interest rate, total deposit value. The model was, thus be:

$$\text{PROF} = \beta_0 + \beta_1\text{LEN} + \beta_2\text{DEF} + \beta_3\text{INT} + \beta_4\text{DEP} + e$$

Where;

PROF is profitability as a measure of financial performance and gauged by return on assets

β_0 is regression constant which is the y-intercept

$\beta_1, \beta_2, \beta_3, \beta_4$, are the coefficients of independent variables that are to be determined

LEN is lending volume as measured by the total amount of loan and advances issued in a year

DEF is loan defaults as measured by the value of the non-performing loans issued which indicates the cost to lending that the SACCOs incur,

INT is the lending interest rate as measured by the average interest rate charged on loans

DEP is the deposit volume as measured by the total amount deposited by members within a year

e is the error term which measure heteroscedasticity in the model

3.4.2 Test of Significance

Regression coefficients tested the magnitude of the relationship between independent and dependent variables. Besides, f and t-significance from ANOVA and regression table established the significances of aggregate and individual independent variables on the predicted variables respectively. Pearson Correlation analysis tested linearity between individual independent and dependent variable. Durbin Watson tested the presence or absence of autocorrelation on the regression residuals.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presented the data findings on the relationship between lending and financial

performance of Sacco's in Nairobi County. Secondary data was collected from the Sacco financial statements and policies. Full dataset was collected on all the 34 licensed Sacco Nairobi. The dataset collected was on profitability, lending volume, loan defaults, lending interest rate and deposit volume. Multiple linear regression analysis was used in analysis which was combined with used of Pearson Correlation, coefficient of determination and analysis of variance (ANOVA).

4.2 Descriptive Statistics

From the annual averages of the 34 Sacco's in Nairobi, as shown in table 4.1 below, it is evident that financial performance increased with increase in deposits. Profitability also appeared to go in tandem with the lending volume of the Sacco's.

Table 4.1: Descriptive Statistics

Table 4: Descriptive Statistics of Key Variables

	PROF		DEP		INT	LEN		
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
			163416	3,264,1		0.005	824559	
2009	0.02154	0.0041	11	51	8.0514	3	8	293814
			810012	8,582,8		0.010	352561	
2010	0.02154	0.0091	41	17	10.011	3	24	612581
			630146	5,621,4		0.011	423458	
2011	0.03011	0.0113	21	55	11.251	3	91	453254
2012	0.03456	0.0067	745201	6,914,5	12.014	0.007	491522	354145

			68	15		1	31	
			756201	6,915,8		0.011	458212	
2013	0.04110	0.0121	14	54	13.011	8	41	425212

Source: Research Data

From the above descriptive statistics it can generally be deduced that profitability of the Sacco’s has grown from 2009 to 2013. This is explained by the increase in the mean value of the profit from 0.02154 in 2009 to 0.04110 in 2013. Lending interest has also grown substantially across the period. The average lending rate in 2009 was 8.0514% and in 2012 it increased to 12.014% with a slight decrease in 2013.

4.3 Correlation Analysis

Correlation analysis was used to determine both the significance and degree of association of the variables. The correlation technique is used to analyze the degree of relationship between two variables. It varies between -1 and + 1 with both ends of the continuum indicating perfect negative and perfect positive relationship between any two variables respectively. The results of the correlation analysis are summarized in Table 4.2

Table 4.2: Pearson Correlation Matrix – 2009-2013

Variables	Lending	Defaults	Interest rates	Deposit volume	Profitability
Lending	1.000				
Defaults	0.191	1.000			

Interest rates	0.259	0.221	1.000		
Deposit volume	0.189	0.211	0.209	1.000	
Profitability	0.521	-0.214	0.419	0.3914	1.000

Source: Research Data

The findings revealed that apart from loan defaults, all the other independent variables were positively correlated with profitability. On average, a moderate relationship was established given a Pearson correlation coefficient of between -0.212 and 0.521. However, a stronger relationship was established between lending volume and profitability given a coefficient of 0.521; this was followed by lending interest rates at 0.419.

This indicates the fact more lending volume results to SACCOS get more profit. The result shows a significant relationship between that lending volume and lending interest rate on the financial performance of the Sacco's. The finding also gives a negative correlation between financial performance and the loan default. This implies that increasing loan default results to a decrease in financial performance of Sacco's in Nairobi County.

4.4 Regression Analyses

The study conducted regression analysis to determine the relationship between lending volume and financial performance of Sacco's.

$$\text{PROF} = \beta_0 + \beta_1\text{LEN} + \beta_2\text{DEF} + \beta_3\text{INT} + \beta_4\text{DEP} + e$$

The table below shows the results for the goodness of fit statistics.

Table 4.3: Goodness of Fit Statistics

Observations	34.000
DF	32.000
R ²	0.4811
Adjusted R ²	0.3261
DW	2.045

Source: Research Data

Determination coefficients (R²) were also carried out to determine the strength of the relationship between independent and dependent variables. The study established an adjusted R² of 0.3261. R² of 0.4811 indicates that 48.11% of the variation in financial performance of SACCOs is attributed to explanatory variables.

Durbin Watson test was also run to establish if the model would be affected by autocorrelation. Since the DW value of 2.045 was close to 2, then it can be concluded that there was no autocorrelation among the model residual.

Table 4.4: Analysis of Variance (ANOVA)

Source	DF	Sum of squares	Mean squares	F	Pr > F
Model	4	17421.092	3484.218	4.943	0.001
Error	29	24873.945	690.943		
Corrected Total	33	42295.037			

Source: Research Data

The study used ANOVA statistics to establish the significance of the relationship between performance and the explanatory variables. The regression model is significant given an f-significance of 0.001. This point to prediction made from the regression coefficient being liable to 0.1% error (99.9% confidence level).

4.4.1 Regression Coefficients

Multiple regression analysis was used to determine the significance of the relationship between the dependent variable and all the independent variables pooled together. This analysis was used to answer the questions; how do the independent variables influence the dependent variable collectively; to what extent does each independent variable affect the dependent variable in such a collective set-up, and; which are the more significant factors? The results are given in the model summary in Table 4.5

Table 4.5: Regression Coefficients

Source	Value	Standard error	t	Pr > t
Intercept	1.269	38.245	3.145	0.000
Lending	2.1665	7.981	3.781	< 0.0001
Defaults	-1.772	6.951	0.2141	0.015
Interest rates	-24.1855	0.0156	1.006	0.021
Deposit volume	8.991	12.1541	2.751	0.124

Source: Research Data

From the regression analysis, the following model was established:

$$\text{PROF} = 1.269 + 2.1665\text{LEN} - 1.772\text{DEF} - 24.1855\text{INT} + 8.991\text{DEP}$$

The findings, thus, indicates that taking all the independent variables (Lending volume, Loan default, lending interest and deposit volume) at null value, the profitability would be 1.269. The regression model further shows that, holding other factors constant, a unit increase in the lending volume would lead to a 2.1665 increase in profitability, a unit increase in loan default would lead to a 24.1855 decrease in profitability, and a unit increase in deposit volume rate would lead to a 8.991 increase in profitability.

4.4.2 Test of Significance

On seeking to establish the test of significance between the independent and dependent variables, the results show that there is a good, negative significant relationship between lending and financial performance of selected SACCOs in Nairobi, County as measured by ROA ($R = -0.566$; $p < 0.001$). There was a moderate but negative relationship between total debt to equity as a

measure of leverage and financial performance given an R value of -0.342. This was significant at 95% confidence level; $p = 0.015$. A good, positive and significant relationship between firm size and financial performance ($R = 0.516$; $p = 0.001$).

4.5 Summary of the Findings and Interpretation

This depicts that of the four independent variables, lending interest rate would have the most adverse impact on financial performance of SACCO's in Nairobi County. Increase in lending volume is as a result of the increase in SACCOs savings. According to Cheruiyot et al (2012), training on savings mobilization is a vital strategy in improving savings mobilization of SACCO members. Increased saving creates a pool for SACCOs to lend to members at a favorable interest rates.

The finding is in agreement to Olando et al (2013) who postulated that the growth of SACCOs' wealth depended on loans management, institutional strengths and innovativeness of SACCO Products. The study findings illustrates that there exists a strong relationship between return on assets and independent variables (firm size, total debt to equity (leverage), nonperforming loans ratio). From the determination coefficients, it can be denoted that there is a strong relationship between dependent and independent variables given a R^2 value (coefficient of determination) of 0.630.

The study also found a very good linear relationship between financial performance and lending given a correlation coefficient of 0.794. Read together with the coefficient of determination, it can be deduced that 63% of the changes in SACCOs' return on assets is brought about by firm size, total debt to equity (leverage) and nonperforming loans ratio.

From the findings and conclusions, the study recommends that in order for SACCOs to check on its leverage status it must check the source of finance to its growth as firms might increase their size and growth while overstretching its debt capacity. The study also suggests that SACCOs should opt for equity financing instead of debt financing if it wants to improve on its leverage. This involves funding growth through retained earnings and issuing of shares. Credit approval and monitoring procedures should focus on the borrower's cash flow and ability to repay in an effort to improve the quality of our loan assets and mitigate future allowances for loan losses.

The findings have some policy implications. Given the adverse effect of lending on the SACCO financial performance and overall macroeconomic health, there is merit to strengthen supervision to prevent a sharp buildup of lending in the future, including by ensuring that SACCOs avoid excessive lending, maintaining high credit standards, and limiting lending to un-hedge borrowers. Beyond this, high levels of lending pose a burden on the economy, through limited lending, highlights the need for a swift, but orderly, clean-up of supervision of lending. Most of the SACCOs lack the efficient risk management mechanism that will help eradicate or sieve out serial defaulters. To effectively lock out these serial defaulters, SACCOs requires referencing solution that will enable them submit and share data whilst processing their customers' credit application. This will help prevent borrowers with unsatisfactory credit record from accessing further credit from other unsuspecting lending institutions

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents discussions of the key findings presented in chapter four, conclusions drawn based on such findings and recommendations there-to. This chapter is, thus, structured into summary, conclusions, recommendations and areas for further research.

5.2 Summary and Interpretation of Findings

The main objective of the study was to establish the effect of lending on financial performance of selected Saccos in Nairobi, County. The study findings from descriptive statistics deduced that profitability of the Sacco's has grown from 2009 to 2013. This is explained by the increase in the mean value of the profit from 0.02154 in 2009 to 0.04110 in 2013. Lending interest has also grown substantially across the period. The average lending rate in 2009 was 8.0514% and in 2012 it increased to 12.014% with a slight decrease in 2013. These findings mean that the more lending volume results to SACCOS get more profit. The result shows a significant relationship between that lending volume and lending interest rate on the financial performance of the Sacco's. The finding also gives a negative correlation between financial performance and the loan default. This implies that increasing loan default results to a decrease in financial performance of Sacco's in Nairobi County.

According to Nkusu (2011), the lending rates/ interest rates are one of the primary economic determinants of performance of any loans. An increase in interest rate weakens loan payment capacity of the borrower therefore non-performing loans and bad loans are positively correlated

with the interest rates. As far as interest rate policy is concerned it plays very important role in NPLs growth rate in a country/economy, Hoque and Hossain (2008) examined this issue and according to them non-performing loans are highly correlated with the high interest rates which enhances the debt burden of the borrowers and causes loan defaults.

The findings revealed that apart from loan defaults, all the other independent variables were positively correlated with profitability. A stronger relationship was established between lending volume and profitability given a coefficient of 0.521; this was followed by lending interest rates at 0.419. This findings are in line with Gisemba (2010) that the lending is the trust which allows one party to provide resources to another party where that second party does not reimburse the first party immediately (thereby generating a debt), but instead arranges either to repay or return those resources (or other materials of equal value) at a later date. The study further established that efficient lending puts into consideration risk factors, economic goals and aspirations of the society and the needs of the lender. This finding is in line with Adams (1992) who noted that the experience from informal finance shows that the rural poor, especially women, often have greater access to credit facilities than to formal sources.

The study finds a positive significant relationship between financial performance and lending volumes of 34 Sacco's in Nairobi County. This implies that increase in lending volume of Saccos to its members significantly impact on the financial performance. Positive relationship between lending and profitability of Sacco's is attributed to the efficient management induced by use of technology. Measures like delinquency where loans are granted from members' savings and so if they are not paid as per the loan agreement, then members' savings are at risk has contributed to good performance of Sacco's, Mwau (2013).

The study also found that loan default negatively impact on the financial performance of SACCOS in Nairobi county. This is line with Olando et al (2013) who posits that default risk has a negative influence on the growth of SACCOS' wealth. This clearly shows that any increase in default risk negatively affects growth of SACCOS' wealth. This shows that as default risk decreases the growth of wealth increases. Gaita (2007) showed that the lending institutions were not growing significantly due to poor lending practices and recommended that lending institutions should make products and services more available. He also recommended that favorable regulatory and legal framework is important for the growth of the institution.

5.3 Conclusions

This agrees with the current study in that when a SACCO society efficiently manages loans, there is high quality loan management and the average collection period is short leading to growth of SACCOS' financial performance. In addition, good protection practice leads to reduced overstatement which enhances shareholders' confidence retention, attraction of prospective members, and prevention of potential crises.

Interest rate has a significant negative impact on financial performance of Sacco's. The finding indicated that average interest rates for loans for the past five financial years from 2009 to 2013 rose from 8.0514 to 13.011. This implied that there was an increase in interest rates in most of the Sacco's on loans/credit. This increase was gradual throughout the study period. Findings indicated that there was a negative relationship between the interest rates charged by the Sacco's the financial performance. The finding is in agreement to Olando et al., (2013) who postulated that the growth of SACCOS' wealth depended on loans management, institutional strengths and innovativeness of SACCO Products. The study findings illustrates that there exists a strong relationship between

return on assets and independent variables (firm size, total debt to equity (leverage), nonperforming loans ratio). From the determination coefficients, it can be denoted that there is a strong relationship between dependent and independent variables given a R^2 value (coefficient of determination) of 0.630.

The study also found a very good linear relationship between financial performance and lending given a correlation coefficient of 0.794. Read together with the coefficient of determination, it can be deduced that 63% of the changes in SACCOs' return on assets is brought about by firm size, total debt to equity (leverage) and nonperforming loans ratio. From the findings and conclusions, the study recommends that in order for SACCOs to check on its leverage status it must check the source of finance to its growth as firms might increase their size and growth while overstretching its debt capacity. The study also suggests that SACCOs should opt for equity financing instead of debt financing if it wants to improve on its leverage. This involves funding growth through retained earnings and issuing of shares. Credit approval and monitoring procedures should focus on the borrower's cash flow and ability to repay in an effort to improve the quality of our loan assets and mitigate future allowances for loan losses.

The findings have some policy implications. Given the adverse effect of lending on the SACCO financial performance and overall macroeconomic health, there is merit to strengthen supervision to prevent a sharp buildup of lending in the future, including by ensuring that SACCOs avoid excessive lending, maintaining high credit standards, and limiting lending to un-hedge borrowers. Beyond this, high levels of lending pose a burden on the economy, through limited lending, highlights the need for a swift, but orderly, clean-up of supervision of lending. Most of the SACCOs lack the efficient risk management mechanism that will help eradicate or sieve out serial defaulters. The upward adjustments of Sacco's interests on term loans are in order to cushion

themselves of the regulatory effects. The result is in line with Ngaira (2011) who found out that SASRA has great impact on the Sacco performance in terms of outreach and sustainability. Most Sacco's improvement on performance both in membership, portfolio and loan cycle and general efficiency was attributed to a number of factors ranging from increased membership, high efficiency, high demand and quick recoveries; which was attributed to SASRA regulatory framework. Most Sacco's were complying with the regulator so as not to be locked out of business by the operator.

5.4 Study Limitations

The researcher met with various challenges when conducting the research that included the fact that the SACCOs ordinarily do not want to give information due to client confidentiality.

Some of the SACCOs would not find the subject to be of interest. Additionally, they did not want to give the information as they considered it of competitive importance.

The contact persons being normally very busy they may not have found a lot of time to fill in the data collection sheet. Since the research was conducted via data collection sheet, a large amount of time was needed to collect information from the SACCOs. Time limitation made it impractical to include every SACCO in the study.

The time period captured in the study was also limited to the licensing of SACCOs commenced that is (2010-2013). This meant that only data for 4 years was used. While all the data collected was used in the analysis, the limited period of time can potentially affect the interpretation of the findings.

This study was also limited by other factors in that some SACCOs may have been reluctant in

giving out their reports.

The study findings were limited by the model of regression used due to statistical errors, accurate data was not obtained but the estimates were used to make conclusions of the findings.

5.5 Recommendation

To improve on their financial performance Sacco's should review credit facilities to curb on the risks associated with loan defaults. This would enhance the evaluation of loan applications by ensuring that loan applications are evaluated and ranked according to the by-laws. High compliance would lead to growth because the loan eligibility depicted a positive relationship with growth of Sacco's profitability. SACCOs should ensure proper loan disbursement to facilitate loan recovery and minimize administrative costs. Loan disbursement would, therefore, expand the lending volume thereby contributing positively to financial performance.

Sound default Loan provision policies should be established by Sacco's. They should make adequate loan provisions to promote safety of funds. This will ensure that loan assets are not overstated and recovery simplified within the regulation frame work. SACCOs should adopt competition that requires effective risk management, effective savings mobilization strategies on members' savings mobilization and see the need to develop marketing and new products/services strategies to make members to benefit from competitive interest rates on loans borrowed and to provide a wider selection of financial products/services.

5.5.1 Policy Recommendation

SACCO members should be made to appreciate that they are the owners and customers of the SACCOs for the realization of maximum results and reward of best and regular savers, should be

taken seriously by SACCOs' management.

The government through the Ministry of Cooperative and Marketing should strengthen supervision, licensing and facilitate SACCOs to acquire bank codes to handle salaries for the professional members and also regulate SACCOs so as to attract new members and retain old ones and embrace the Old Age Savings Insurance Scheme to meet the special needs of cooperative members it serves as a high interest long-term Old Age Savings Scheme with added Life Assurance and, it also helps to meet day to day trading needs.

5.5.2 Suggestion for Further Research

The study suggests that future researchers should provide prior sensitization to the firm the purpose of the data requested is to be used for academic research only and provide assurance for confidentiality of the information obtained.

The study suggest that the researcher should book early appointments with the contact persons to ensure that they are available and have allocated the time to provide the information requested for research.

Future research should source out information from the target companies through other sources for example use of company websites, magazines and online journals to obtain the same information which would have posed difficulties when obtained through contact persons.

The study suggests that the researchers should make use of statistical tools such as SPSS and STATA to obtain accurate results and interpretation analyzed from the data collection sheet.

Furthermore, external factors such as tax rates, regulations, inter-enterprise debt can also form grounds for further studies. For Sacco's to be competitive there is need for developing new innovations aimed at achieving good sales and customer base. There is also need for best customer awareness of Sacco's products through use of various promotional tools

Moreover, further research should be carried out effect of other financial institutions on financial performance of SACCOs. This is because different financial institutions have unique characteristics and diverse contextual realities that might influence their responses and consequently the approach to different response strategies. This would bring out comprehensive empirical findings on the effects of product diversification on SACCO's profitability.

The study also suggests that a study can be conducted exclusively on determinants of non-performing loans in SACCOs so as to nip the problem in the bud owing to the negative established effect on performance.

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APPENDIX I: INTRODUCTION LETTER

PAMELA WANJA NYAGA,
MBA STUDENT–SCHOOL OF BUSINESS,
UNIVERSITY OF NAIROBI,
NAIROBI, KENYA.

THE CHIEF EXECUTIVE OFFICER,

Dear sir/madam,

RE: **REQUEST FOR RESEARCH DATA**

I am a student from the University of Nairobi undertaking a degree course in Masters of Business Administration (MBA) and carrying out a research on “The effect of lending on the financial performance of savings and credit cooperative societies in Nairobi County”. Your firm has been selected to form part of this study. I kindly request for your assistance in obtaining the audited financial statements and credit policy for the year 2009-2013 for the completion of the attached data collection sheet. The information and data provided was used exclusively for this study and treated with utmost confidentiality.

Thanking you in advance.

Yours faithfully,

PAMELA WANJA

APPENDIX II: LICENCED SACCOS IN NAIROBI COUNTY

List of licensed savings and credit cooperative societies in Nairobi County; list by Sacco supervision annual report 2012

Airports Sacco society ltd

Afya Sacco society ltd

Asili Sacco society ltd

Chai Sacco society ltd

Chuna Sacco society ltd

Comoco Sacco society ltd

Harambee Sacco society ltd

Hazina Sacco society ltd

Jamii Sacco society ltd

Kenpipe Sacco society ltd

Kenya bankers Sacco society ltd

Kenya police Sacco society ltd

Kingdom Sacco society ltd

Mwalimu national Sacco society ltd

Mwito Sacco society ltd

Nacico Sacco society ltd

Naku Sacco society ltd

Nation Sacco society ltd

Orthodox Sacco society ltd

Safaricom Sacco society ltd

Sheria Sacco society ltd
Stima Sacco society ltd
Orient Sacco society ltd
Ukulima Sacco society ltd
UN Sacco society ltd
Wanaanga Sacco society ltd
Wanandege Sacco society ltd
Waumini Sacco society ltd
Nassefu Sacco society ltd
Fundilima Sacco society ltd
Maisha bora Sacco society ltd
Nafaka Sacco society ltd
Kenversity Sacco society ltd
Magereza Sacco society ltd

APPENDIX III: DATA COLLECTION SHEET

DATA COLLECTION SHEET				
NAME OF THE SACCO:				
Year	Total Loan & Advances Kshs'000'	Defaulted Loan & Advances Kshs'000'	Average Lending Interest Rate (%)	Total Deposits Kshs'000'
2009				
2010				
2011				
2012				
2013				

APPENDIX IV: DESCRIPTIVE DATA

SACCO	Return On Assets	Nonperforming Loans Ratio	Total Debt To Equity (Leverage)	Firm Size
United Nations Sacco Ltd	4.57	7.53	85.92	7.427102
Hazina Sacco Society Ltd	6.56	4.21	79.48	7.22354
Elimu Sacco Society Ltd	3.89	4.83	85.87	7.223431
Kenversity Sacco Society Ltd	5.55	1.45	86.00	7.219425
Afya Sacco Society Ltd	2.64	2.28	89.67	7.104401
Ufundi Sacco Society Ltd	6.34	5.28	83.60	7.252128
Airport Sacco Society Ltd	4.22	3.44	85.54	6.875067
Wanandeghe Sacco Society Ltd	3.56	4.04	88.81	6.942845
Transcom Sacco Society Ltd	4.22	1.27	86.04	6.933623
Nation Staff Sacco Society Ltd	5.02	1.80	81.53	6.865976
Chai(Ktda) Sacco Society Ltd	6.88	0.57	78.02	6.814367
Ardhi Sacco Society Ltd	2.63	2.43	90.89	6.518037
Ufanisi Sacco Society Ltd	1.45	2.14	87.88	6.530897
Maisha Bora Sacco Society Ltd	4.39	4.11	86.63	6.559154
Chuna Sacco Society Ltd	3.18	6.92	84.90	6.823852
Nafaka Sacco Society Ltd	2.76	3.30	88.61	6.552924
Kenpipe Sacco Society Ltd	2.39	6.87	84.67	6.50246
Nacico Sacco Society Ltd	5.88	4.60	85.76	6.412447
Sheria Sacco Society Ltd	-2.98	11.66	88.83	6.415612

Wanaanga Sacco Society Ltd	2.67	8.43	85.68	6.394759
Nassefu Sacco Society Ltd	3.93	2.11	85.04	6.346553
Miliki Sacco Society Ltd	3.49	4.08	81.87	6.127682
Ukulima Sacco Society Ltd	0.20	10.96	89.39	6.104869
Harambee Sacco Society Ltd	-0.41	11.43	90.35	6.023904
Asili Sacco Society Ltd	0.75	3.58	86.79	6.064049
Teleposta Sacco Society Ltd	1.41	13.27	86.34	6.063587
Kenya Police Sacco Society Ltd	1.68	5.68	86.26	6.27853
Magereza Sacco Society Ltd	3.23	3.74	86.28	6.029371
Mwito Sacco Society Ltd	2.66	6.67	90.16	5.972972
Jamii Sacco Society Ltd	1.98	10.66	88.25	5.972078
Fundilima Sacco Society Ltd	4.50	0.00	81.88	5.907146
Mwalimu Sacco Society Ltd	3.68	3.26	85.20	5.948967
Safaricom Sacco Society Ltd	1.51	13.12	84.99	5.961598
Kenya Bankers Sacco Ltd	3.29	14.64	72.83	5.799332
Stima Sacco Society Ltd	2.71	12.85	82.51	5.715336
Naku Sacco Society Ltd	5.17	4.79	81.89	5.784789
Kingdom Sacco Society Ltd	0.54	10.25	81.23	5.724526
Ukristo Na Ufanisi Sacco Ltd	2.30	12.18	74.64	5.696859
Tembo Sacco Society Ltd	1.99	4.62	76.48	5.659414
Wananchi Sacco Society Ltd	0.17	27.45	67.53	5.343889

APPENDIX V: RESULTS DEDUCED FROM FINDINGS

Table 1: Descriptive statistics of key variables

	PROF		DEP		INT	Std	LEN	
	Mean	Std. Dev	Mean	Std. Dev	Mean		Mean	Std. Dev
2009	0.02154	0.0041	1634161 1	3,264,1 51	8.0514	0.0053	8245598	293814
2010	0.02154	0.0091	8100124 1	8,582,8 17	10.011	0.0103	3525612 4	612581
2011	0.03011	0.0113	6301462 1	5,621,4 55	11.251	0.0113	4234589 1	453254
2012	0.03456	0.0067	7452016 8	6,914,5 15	12.014	0.0071	4915223 1	354145
2013	0.04110	0.0121	7562011 4	6,915,8 54	13.011	0.0118	4582124 1	425212

Table 2: Pearson Correlation Matrix – 2009-2013

Variables	Lending	Defaults	Interest rates	Deposit volume	Profitability
Lending	1.000				
Defaults	0.191	1.000			
Interest rates	0.259	0.221	1.000		
Deposit volume	0.189	0.211	0.209	1.000	
Profitability	0.521	-0.214	0.419	0.3914	1.000

Table 3: Regression Coefficients

Source	Value	Standard error	t	Pr > t
Intercept	1.269	38.245	3.145	0.000
Lending	2.1665	7.981	3.781	< 0.0001
Defaults	-1.772	6.951	0.2141	0.015
Interest rates	-24.1855	0.0156	1.006	0.021
Deposit volume	8.991	12.1541	2.751	0.124

From the regression analysis, the following model was established:

$$\text{PROF} = 1.269 + 2.1665\text{LEN} - 1.772\text{DEF} - 24.1855\text{INT} + 8.991\text{DEP}$$