

**THE EFFECTS OF CREDIT INFORMATION SHARING ON PERFORMANCE OF
NON-DEPOSIT TAKING SAVINGS AND CREDIT COOPERATIVE SOCIETIES
IN NAIROBI COUNTY**

BY

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DECLARATION

I declare that this is my original work. This work has not been presented for award of degree in this university or any other university, no part of this work been reproduced, reprinted or made available to others in any form.

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DEDICATION

I dedicate this project is to my family and friends. A special feeling of gratitude to my wife, daughters, Judith and Joyline, sons, Zedrick and Pravin for their unyielding support, understanding and creating the ideal environment to get the work accomplished within prescribed time.

ABSTRACT

The objective of this study was to investigate the effects of credit information sharing on performance NDTs in Nairobi County. This study concludes that credit information on investment decisions on performance of Non- deposit taking Sacco is mainly influenced by the frequency of receiving negative information on punishing defaulters and influence of lenders and entrepreneurs. The results also showed that credit information sharing reduces the portfolio of Non- performing loan with a moderate performance. It was found out of the information sharing on credit registries on performance of Non-trading in Kenya economic information sharing was greatly rated by sampled respondents while accessibility of credit bureaus, business continuity and protection of confidential information and privacy was moderately rated by respondents. There was evidence of relationship between credit information sharing and performance NDTs. It was evident that trend of loans classified as bad or non - performing to total loans improved amongst financial institutions NDTs included.

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ACRONYMS AND ABBREVIATIONS

ADM	Annual Delegates Meeting
ANOVA	Analysis of Variance
BOSA	Back Office Service Activities
CBK	Central Bank of Kenya
CBR	Central Bank Rates
CCR	Comprehensive Credit Reporting
CIS	Credit Information Sharing
CRB	Credit Reference Bureau
CRR	Credit Reference Reporting
CU	Credit Union
DTS	Deposit Taking SACCOs
FOSA	Front Office Savings Activities
FSD	Financial Sector deepening
GDP	Gross Domestic Product
ICA	International Co-operative Alliance
ICT	Information, Communication Technology
KCISI	Kenya Credit Information Sharing Initiative
KCPA	Kenya Credit Providers association
KES	Kenya Shilling
KUSCCO	Kenya Union of Savings and Credit Co-operatives
MFI	Micro Finance Institution

MOI&ED	Ministry of Industrialization and Enterprise Development
NDTS	Non deposit Taking SACCOs
NPL	Non Performing Loans
PMT	Payment
SACCO	Savings and Credit Co-operatives Society Limited
SASRA	Sacco Societies Regulatory Authority
SPSS	Statistical Package for Social Sciences
WOCCU	World Council of Credit Union

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Savings and credit cooperative societies (SACCOs) are distinct association of individual voluntary pool and mobilize resources with the objective improves members economic and social welfare. SACCOs are financial institution owned, member controlled and managed democratically on the basis one man one vote. The global estimation of the number of cooperatives is high in Africa, with most concentration of the cooperatives in Kenya. According to SACCO Societies Regulatory Authority -SASRA (2011), there are two hundred and fifteen savings and credit organizations which are undertaking ‘quasi banking’ services-deposit taking SACCO business. They operate with the purposes of savings promotion, providing low interest credit, advances and related services to its members (Waweru, 2011).

It is estimated slightly above 80 percent of populace in less and developing in the sub-Saharan Africa experience insufficient access for saving and credit services from financial institutions. Ideas or notions behind the establishment of SACCOS were promotion savings and make readily available credits to the members and acts as avenues of economic growth. SACCOS are key micro-financing institutions aimed for the mobilization of financial resources for various members’ development activities. Further, they have the ability and opportunity to attract clients unattractive to banks (Branch, 2005).

The ICA report 2006 indicated that countries achieving economic development have vibrant and dynamic cooperative sector contributing substantially to the enormous growth of these economies. In addition, SACCOs too play significant role in the

provision of financial services to the poor by providing savings and credit and investment opportunities to individual member and institutions. Studies have shown that credit information failures leads to resource allocation inefficiencies in the market for deposits as such leads to instability in the financial sector (Healy & Palefu, 2001; Flannery, 1998). It is argued that financial information is perfect and evenly shared only when the lender and borrower are transactions.

Information asymmetric is both financial and economic transaction because one party endowed with information has chance to exploit others with less information. There is growing interest among economists on the important of credit information sharing in the non-deposit taking institution such as SACCOs and table banking. In many respects building confidence in the non-deposit taking becomes crucial determinant in the sustained and vibrancy of the sectors. The financial institutions can play an important role in responding to new opportunities, particularly when the potential is resented to them in a clear and consistent manner.

1.1.1 Credit Information Sharing

Credit information sharing is the process of data exchange about applicant's credit status between various financial institutions or credit bureaus. Information privately provided to credit bureaus granted access and use so far as the data is accurately and timely provided. Credit information sharing in Kenya came into being fully operationalized in the year 2010 after widely consultation among stakeholders in the financial actors. They include central bank of Kenya, Kenya bankers association and all tiers of commercial banks in Kenya. Previously, credit information sharing within the banking sector was governed by the Banking Act 2006 (FSD – Kenya, 2012).

These achievements have seen financial institutions across the industry and sector share both negative and positive information credit status of the applicants. Furthermore legislations governing microfinance (MFIs) and SACCOS on credit information sharing was launched in 2011. There is substantial and rapidly expanding strong evidence on connection between how NDTs manage their credit and the overall results realized. Theory and practice has vehemently attributes positive correlation of performance NDTs and credit information sharing and has expanded greatly in the previous years.

Studies have linked good credit practices such as appropriate loans appraisals to better and improved Sacco performances. CIS is undoubtedly an important mechanism information asymmetry reduction in the financial transactions among lenders and borrowers. Millor and Thakor (1985) in their study asserted that low rated credit lenders charge higher rates compared to high rated credit lenders. It is essential for prospective lenders to only access the information with acceptable reason as a tool in determination of creditworthiness of a borrower (Sullivan & Sheffrin, 2003).

While evaluating credit request, financial institutions often collect first- hand information from the credit application details and subsequently from other lenders who have credit transactions with the applicant. Ideas and theory on exchange of credit information voluntarily occur through “private credit bureaus” or regulated through “public credit registries” as a better mechanism in credit performance determination. Sharing of credit information is relevant in adjudging credit transaction in countries with weak commercial and information asymmetry. According to Japelli, Brown and Pagano (2007), poo corporate reporting coupled with weak legislation enhances asymmetry information in the borrower- lender and reduction incentives for financial institutions in make appropriate advances.

The association of Kenya credit information initiative (KCSI) and Credit information sharing (CIS), in collaboration with other financial actors prescribed that all financial institutions follow the regulations with objectives of credit reference bureau only provided negative credit information about their borrowers with reported cases on bad or non-performing loans. In 2012, Kenya's bankers' regulator (CBK) swiftly revised the banking regulation in banking and microfinance Act respectively to incorporate requirements that banks and other financial institutions share both negative and positive as opposed to only negative information. Asymmetric information is linked to principle-agent relationship. Principal agency problem increases costs and making them inefficient as expected (Farrell, 2003). From that context, asymmetric can be described as situation where one party to a transaction possesses information which is not known by the other party (Ivashina, 2009). Borrower's characteristics and indebtedness have significant effects on credit market activities. In such situation, improves the non-deposit taking knowledge on the applicants hence reduces information rents and can operate as borrower discipline device.

1.1.2 Performance of SACCOs

Financial subsector credit industries have recent past faced with competitive business operations between each other for customers, consumers, savings, deposits and loans. This upsurge competition across the financial transaction across credit and financial market has grown with large and diverse participants. Competition actors rally behind commercial banks, savings and loan banks, fund management, mortgage firms, Saccos and insurance companies.

Recent contributions by Mendoza (2010) studied how a fluctuation in asset prices affects values of collateral internationally funded projects. Performance of both Deposit Taking

and NDTs SACCOs can be measured by ascertaining the Capital Adequacy, Asset Quality, Management Quality, Earnings and Liquidity (CAMEL) model. According to the study, good performance of SACCOs is critical for the long term competitiveness and sustainability of a deposit taking Sacco. Performance of SACCOs was measured based on the accepted performance regulatory guidelines and the minimum regulatory requirements. Asset quality is measured by percentage of good loans to total assets of the SACCOs. As the percentage of total loans increased, performance was negatively affected as most were turning out to be problematic loans. Management quality will be measured by possession of post-secondary education and professional trainings for staff and Board of directors and availability of policies. Earnings were measured by the payouts of interests form share capital and dividends contributions from the members. As earnings increase, performance was improving in the establishments. Liquidity will be measured by attainment of adequate loaning and lack of backlogs.

1.1.3 Savings and Credit Cooperative Societies in Kenya

According to data and reports by KUSCCO, Lumbwa Cooperative Society formed in 1908 was first Co-operative Society formed by the white settlers (Europeans) farmers to patronize on advantage of economies of scale on activities related to agricultural productions. Tremendous steps taken by the Government resulted in expansion in network, growth in capital base, membership and general upstream SACCO Society movement hence government consideration that SACCOs the nations pillars of economy (Gardeklint, 2009). The government of Kenya has since recognized cooperatives have the strength and suitable framework on the SACCO movement achieve members' aspiration precipitate to economic development of the nation.

In 2010, ministry in charge of cooperatives register indicate upsurge 5,000 registered SACCOs with hooping members slightly above 7 million mobilizing savings over Ksh 200billion (Ndung'u, 2010). SACCOS represents one of the important sources of financial institutions in developing states (Labiars and Perilleux, 2008; Owen 2007). SACCOs perform an active financial intermediation functions, particularly mediating between net savers verses net borrowers, savings, credit and individualized member investment opportunities.

Sizya has argued that due to liberalization of cooperative formation, women and the youth have engaged themselves in many economic activities. Presently, these are over 46,000 SACCOs in over 70 countries worldwide and of this about 21,000 are serving 16 million people in Africa, Asia and Latin America. Non-Deposit Takings (NDTs) are financial institutions that receives/take money from the public by way of contribution and lend out the money to the member - customers inform of credit, loan and/or advances. All NDTs operate on the system of back office activities (BOSA). Although non-deposit taking sector is small it performs an important function and has continuously grown in market sphere over the years.

Kenya has established a very sound SACCO regulatory mechanisms with prudent regulatory of the industry while effectively balancing customer protection and financial customer transaction transparency. In 2008 a SACCO regulatory body was established the Sacco Societies Regulatory Authority (SASRA) with the main objective to licenses and supervises DT SACCOs in Kenya. However NDTs are supervised by the commissioner of Cooperative under ministry of Industrialization and Enterprise Development. Deposit Taking (DT) SACCOs has made as much available data indicate their incense requires item to align their policies and system to regulatory standards.

However, NDTS has been ignored and Central Bank of Kenya database shows that regulation of the NDTs is still in progress. Furthermore examination of the available literature reveals that data on NDT SACCOs or microfinance is still lacking in Kenya with previous studies concentrating on Deposit Taking SACCOs Microfinance Kago, (2014) and Mureithi, (2012).

1.1.4 Credit Information Sharing and Performance of SACCOs

A credit reference bureau is an institution that is charged with the collection, collation, dissemination and distribution of information about credit worthiness of customers of members of Kenya Credit Providers Association. Traditionally credit bureaus have been missing in developing countries such as Kenya. However, in the recent past, this concept has increased its existence due to market forces or through public sector interventions. Financial institutions, such as non-deposit takers have realized the importance of such agencies. As competition increases, multiple NDTs have competed for the same clients. This growth in the sources of credit may erode borrower's reputation because of multiple loans. To this effect, non-deposit takers have seen the need of sharing credit information.

Previous studies have documented that as credit bureaus develop the poorest borrowers may become less well off (de Janvry et al, 2003). Indeed, the poorest segment of borrowers may be left out from portfolios mostly based on credit rating reports. Therefore while information sharing may be a valuable institutional innovation, substantial efforts in other areas will be needed to remove the obstacle and overcome the challenge of further expanding the frontier of financial services. According to Vercammen (1995) credit histories and information sharing improves adverse selection declines. Sharing credit information has since been viewed and recognized as

mechanisms to tackle the issues of lender- borrower relationship and decrease the menace of asymmetry information threat.

It is also important to note that information sharing creates environmental incentive to prospective defaulters to make prompt payments on their loans and advances or defaulted debts. Indeed it can be noted that credit providers have increased their loan collection of loans classified as non-performing or bad since introduction of credit information sharing. Credit and the lending industry, asymmetric information is an economic problem that shoots from the lenders knowledge of the borrower's likelihood to pay PMT imprecise and ought to be concluded based on information available. Information sources from the applicant are verified by lender to check on the authenticity of the information. Pagano & Japelli (1993) studies shows that CIS reduces chances applicant's selectivity and moral hazard by enhancing information on the credit applicants. Padilla and Pagano, (1997) show that CIS too mitigate deferment or deferral issues in lending relationship by prompting completion to applicants hence decreased information costs and rents.

1.2 Research Problem

The systematic application of credit data in assessment of loans and appraisal are remarkable development in retail and corporate banking in financial industry as a whole. Currently, loan appraisal and assessment take shorter time as compared to previous times. Thanks to the technology, application systems used in generation of credit reports on applicant's status on compliance to credit terms and conditions. There is a positive probability switching location or employers creating impediment for lenders to share information on borrowers' physical location.

Credit scoring based on credit registries(CRB) suggests that, the use of credit reports allow credit providers to accurately and precisely predict the probability of loan default (Kallberg and Udell, 2003). Brown and Zehnder (2008) suggested that credit information accustoms and discipline borrowers to make their payment promptly. In aggregate credit volume is high in countries where information sharing is more developed and compared undeveloped countries (Japelli and Pagano, 2002; Djankov et al, 2007). Lin et al., (2012), observed competition, credit information and efficiency of the bank put across proclamation that there exists negated association between credit information sharing and bank efficiency.

According to Pagano and Japelli, 1993), credit information sharing mechanism decreases adverse selection by enhancing the pool of beneficiaries leading improved efficiency of banks in credit allocation and disbursement. Miller (2003) indicates that CIS plays an important role in enhancing performance of financial institutions by reducing the probability of loan defaults. Several financial reports and studies have highlighted more credit information sharing as essential and beneficiary to performance credit market, selection of good credit borrowers and further reduce bad loans cost and rents of firm financing (Brown, Japelli and Pagano, 2009).

Local studies have also tended to focus more on negative information sharing. Ngugi (2012) studied impacts of credit risk on credit information for commercial in Kenya, Bonaya (2012) study measured loan performance using default rate while Gitahi (2013) studied relationship between of level non-performing loans on commercial banks in Kenya and credit reference bureaus. According to Ndung'u, (2002) information asymmetry problem has viewed as a contributory factor to high level of bad level in the financial industry in Kenya leading the evolution of information sharing by regular CBK,

KBA and KCPA respectively. Kabiru (2002), Mimu (2011) studies on credit risk assessment and the impact of credit reference bureaus on the performance financial institutions.

Kioko (2012), the study on information sharing and performance of DTs, the study did explore more on NDTs, yet information sharing on both classifications of SACCOs is vital. This study seeks to fill this knowledge gap and justifies further research on the effect of CIS on performance of NDTs and expected benefits accrue with the use of credit reports including reduction of cost of credit. The relevant issue for empirical investigation therefore is what influence does credit information sharing have on performance of Non-Deposit Taking SACCOs?

1.3 Research Objective

1.3.1 General Objective

The study will examine the effect of credit information sharing on performance of Non-Deposit Taking Sacco in Nairobi County.

1.3.2 Specific Objectives

- i. To examine the effect of lending volume on performance of Non - Deposit Taking SACCOs in Nairobi County.
- ii. To establish the effect of investment decisions on performance of Non-Deposit Taking Sacco in Nairobi County
- iii. To determine the effect of loan defaulting on performance of Non-Deposit Taking Sacco in Nairobi County.
- iv. To examine effect of credit registries on performance of NDTs in Nairobi County.

1.4 Value of the Study

This study is intended to establish whether exists evidence between effects of credit information sharing on performance of NDTs. This study to equip SACCO managers with better understanding of how to improve the information sharing, the critical success factors, the challenges faced by the NDTs and possible interventions that could be employed to overcome such challenges.

Stakeholders including the government, policy makers apply beneficiaries data to identify shortcomings arising out sharing credit information in the financial sector and improve on it. The research findings shall also aid in the formulation and enforcement of financial legislation that would facilitate the enhancement in solving the factors perceived to affect the information flow. More so, the service providers need to appreciate the perceived weaknesses in the SACCO sector and how it affects service delivery.

The findings in this research are needed to accelerate more research in areas of information sharing on performance and lay basis of further research. Contributions from the study will immensely enhance to documented and non-documented body of knowledge and academic wealth in the field of information sharing among financial institutions in Kenya. Further, study to enhance knowledge on linkages between information sharing and performance of NDTs in Nairobi County. While the sector has attracted many players, literature is still little and by studying NDTs in Nairobi, the researcher is able to add more literature into the market and future researchers will be able to refer and extract more information regarding NDTs.

Financial institutions shall provide enhanced framework for better information sharing through credit registries (CRB), public and private registries which improve information asymmetry, reduction in bad or non-performing classified loans.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents theories and empirical literature on the effects of credit information sharing and performance of NDT SACCOs. Part of this chapter to review literature from other scholars to build foundations for this study. Review of theories, empirical and general literature shall be observed during the study in line with objectives of the study. An effort is too done to evaluate the contributions and knowledge identified for purposes of filling.

2.2 Theoretical Review

Theoretical framework of research forms a philosophical basis on which the research is rooted or located, means, linkages between the concepts and practical application techniques on effects on credit information sharing. Further, acts an aid to logical sense of the relationship between factors and variables involved in the theory.

Further, the theory link defines variables incorporated so to ensure that the theorized relationship between them is well comprehended. The theoretical framework too guides the researcher to determine how the factors will be measured and examine their statistical relationship the researcher intends. This section critically reviews theoretical models including; Information asymmetry theory, Theory of financial intermediation, Theory of Corporate Governance, Adverse selection theory and Moral Hazard theory.

2.2.1 Information Asymmetry Theory

This theory is associated to the works of George A. Akerlof, A. Michael Spence, and Joseph E. Stiglitz on their contribution on economic implications of asymmetric

information during the 70s (Armstrong, Barth, Jagolinzer & Riedl, 2010). Information asymmetry is experienced where transactional decisions comprising of two or more parties where one party in the composition is better placed with information than the parties. Such situation creates or institutes transactional power imbalance which may cause awry in the transactions leading failure in the worse (Yun, 2009). Further other studies argue that use of bank's short-term credits mitigate sectors collisions via advanced checks, and balances has an end effect decreasing information asymmetry (Faulker and Peterson, 2006). Ekumah and Essel (2003) asserts that Information asymmetry describes the condition where relevant information is not known either in part or in full to all parties involved in transaction. Asymmetry information influence market players and market participants to take risk because information the provided is deemed incomplete, inaccurate, untimely and inadequate to the lenders perspective. (Akerlof, 1970).

Previous analysis on information asymmetry has been discussed in terms of quality and uncertainty mostly in relation to a two actor in economic transactions. Existence information asymmetries between lenders and borrowers, high- lowquality goods and services can co-exist in the marketplace (Akerlof, 1970). This coexistence requires buyers to determine the amount of loan and services they borrow. Given information asymmetry, this is an inherently problematic and costly, task

Several studies argued information asymmetry often result to credit rationing disadvantaging borrowers since they are arbitrarily denied loans (Stiglitz and Weiss (1981)). It is evident that asymmetric information problems seriously undermine efficient allocation of credit, therefore credit information sharing outweighs rigidity of information between lenders and credit beneficiaries. The adoption of information

sharing as mechanism by both in public or private credit registries and subsequent access and share information either compulsory and voluntarily report to lenders eliminates credit informatory brokers. According to He & Wang (2007) a reasonable bank would try to eliminate asymmetric information by incurring search costs to acquire reliable information on the borrower requesting a loan.

Credit customers always exhibit and demonstrate different attitudes during service of credit facilities advanced to them. Such experience taught lesson good enough to group their customers to ascertain the quality of them. It evident in credit market that non-classified credit consumers operates under CIS since they have positive willingness to pay and in the contrary classified prefers no information sharing due their poor credit transactional action previously. Centrally, key element behind information asymmetry model is the experience of asymmetry between two actors during an information exchange(the information owner and absorber or user).

2.2.2 Theory of Financial Intermediation

According to Levine, Loayza and Beck (2000), the theory of financial intermediation has a key function in the banking relationship to overcome information asymmetry between the borrower and the lender and thus continues interaction enables the lenders to produce creditworth information the borrowers. The availed information provides strong proportion to credit and loan officers to assess and appraise the credit to borrower. Current theories assert that financial intermediaries are built on economic imperfections that emerge in the 1970s with minimal contributions (Diamond, 1984 and Scoltens & Van Wenseen, 200). Financial intermediaries exist due to their ability to decrease both transactional and informational costs arising from information asymmetry.

Various actors and participants in financial sectors including banks, SACCOs, fund managers, insurance firms and other sector agents typically constitutes valuable varied credit informational details on the abilities to determine the value of assets and securities offered in the market. Based on the theory of asymmetric information problems often arise to non-financial firms issuing a security is bestowed with information on potential cash flows associated with the security than borrowers. Further some individual beneficiaries have more information about a security's value than other borrowers. Theories of financial intermediation has a positive contribution to economic growth since it acts as a measure on the rate of saving channeled to investment activities or social - marginal productivity of investment contributing financial development and positive for economic growth. The general understandings on roles contributed financial intermediaries are immense and varied across the sector. Intermediation theories are backed resources allocation complete markets models. In such situation it has developed and suggested transactions such as transaction costs and asymmetric information preferred are essential in comprehending as indicated subsequent authors have stressed the role of transaction costs (Gurley and haw 1960).

Exchanging information on applicant's creditworth, financial institutions and banks as well shall simultaneously assess the quality of foreign credit applications and carefully advanced to both customers without bias. Financial institutions aim's on the exchange information on credit applicants is to assess past financial transactions with intentions of increasing the possibility of lending to non-classified credit consumers. On the other hand such action leads to inability to receive maximum compensation eventually decline in overall loans and disbursed.

The Adverse selection issue is signaled only at situations where lenders are not able to make precise distinction of both prospective from non-prospective borrowers leading to all borrowers being charged a normal interest rate that reflects their pooled experience. Emergence of such scenarios prompts lenders to introduce fees higher than what worthy borrowers deserve have been pushed and charged higher to remaining strained borrowers. Introduction and application of sharing of the credit information, lenders are able to draw a distinct line classification and non-classification of borrowers. Barron and Staten (2008), prompt and precise, timely and accurate status of applicants improves assessment borrowers risk thoroughly and set loan terms appropriately.

Padilla and Pagano (2000), studies information exchange credit on possibilities of defaults, borrowers are encouraged to synergies. Persistence of asymmetric information in financial credit sector result to limitation or rationing of credit since lender are disadvantaged and further in fix to make distinction of highly prospective and lowly prospective applicants borrowers. Vigorous studies coupled with contentions indicate that asymmetry information lead to inverse or over-lending in credit market (De Meza & Webb (1987). In the contrary, financial institutions banks included remain key actors in the sectors because they take numerous risk measures by using advanced credit technology collating and collecting private information, treat, screen and monitor borrowers efficiently (Allen and Santomero, 1998) & (Freixas and Rochet, 1999).

2.3 Determinants of Credit Information Sharing

Information sharing undoubtedly is a major role in ensuring minimization biased information between banks and customers. Millor and Thakor (1985) notes lender rated lowly often pay higher interest rates coupled with a higher premiums compared to bankers rated highly. Sullivan & Sheffrin (2003), they observed that lenders should only

access information only permitted circumstances and only for the purposes of assessing and determination of creditworthiness of the borrower. Vercammen, (1995) on the hand asserts that, credit history often lengthens and information sharing improves adverse selection. Therefore information sharing is major mechanism aimed to address the lender- borrower relationship and further attempt decrease the menace of asymmetric information of threat. It is also important to note that information sharing acts an incentive for defaulters to make payments reducing the possibilities of defaulting. Sector reports suggest credit providers indicates increased their loan collections on loans classified as bad non-performing loans as attributed to information sharing.

Introduction and development of these information-sharing institutions impacts microfinance organizations in several additional ways. Negrin, (2001) discussed close development of strong credit market attributed to shared information and concluded that the relationship has a positive correlation. MFIs are thrilled to be able to limit the opportunistic behavior of their clients and acquire an additional tool in their screening of applicants. Subsequently, however, they lose the advantage based on the power of privately held information, that now they have to share with their competitors, and they may thereby lose some of the potential rents associated with this private information. Positive information sharing allows creation of “reputation collateral” associated to credit score, provides resourceful data and reports in the credit market and signals positives to individual borrower's creditworth in the group or pool of lenders.

Inaccurate information both previous and current financial ability of prospective borrowers is an extreme impediment in the assessment on the creditworth and chance of payment the advances timely. Due to the situation institutions were established and regulated to bring sanity in the perennial issues of institutional and individual borrower.

Introduction and subsequent implementation sharing information credit, is undoubtedly relevant and key to ensure decline of information asymmetry prevailing to credit providers and beneficiaries respectively.

Studies and surveys conducted concluded that sharing of applicants credit transactions is with no doubt that it decreases the probability multiple loans since individual lenders have technologies to confirm any credit benefits on indebtedness of borrowers from all registries of other lending sources (Bennardo, Pagano and Piccolo, (2009). Further they argued that shared information is sign of decreases over-indebtedness, borrowers' ability to pay PMT is increased and puts an element form of uncertainty on the ability of borrowers to repay thus improved credit market operation non-classification of borrowers.

Public registries are wholly operated and managed publically and centrally by the regulator (CBK), private registries or bureau is managed and practiced privately individual licensed to practice privatization financial and borrowers' profile (CRB). Pagano and Jappelli 1993) asserted and predicted ordinarily, lenders are motivated of sensitive to share information on the borrowers' creditworth only when credit beneficiaries are different minimal competition among credit providers in the market. Competition however, high where cost of market entrants are low resulting to competition profitable borrowers thus reduction in profit levels. There are hardly empirical studies on optimal interest rate spreads since that would arguably depend on several factors and may not be static over time. The few studies available with respect to optimality of spreads focus on theoretical mathematical derivations of the conditions under which an optimal spread is achieved, typically focusing on profit maximization

behavior of commercial banks, based on the relevant variables which include those listed above (bank-specific factors).

The benchmark work in this approach according to Ho and Saunders (1981) and other similar approach include Zarruk and Madura (1992), and Mannasoo (2012). In assessing cost of credit, banks levy numerous fees for intermediation services offered under uncertainty programs and set various attractive interests for term deposits and loans respectively. An Intermediary costs is the marginal disparity on cost of borrowing and subsequent return (Ngugi, 2001).

2.3.1 Information Sharing

This is the process of exchange of information between financial institutions and other credit providers which facilitate obtainable details on individual's credit worthiness, credit standing status, character, general reputation, financial obligations. Increased and seamless information sharing reduces operating costs and hence likely to result in lower cost of credit.

2.3.2 Credit Default cost

Default cost represents costs associated with negotiation and collection of debts and an amount owed by defaulting borrowers and is often reflected as loan impairment or provision amounts based on non-performing loans. According to Klein, (1992) information sharing is both an incentive and motivator to credit beneficiaries to promptly honour and repay their obligations and debts since they well aware of consequences of defaults and information is readily available to all lenders through CRBs.

2.3.3 Administration & Transaction Cost

These are cost relating to financial credit intermediary costs which include loan processing costs, administration, and operational costs. The bottom line of credit report is to provide records of applicants' details and previous payment transactions enabling lenders evaluate risk appropriately and related costs and time factor.

2.3.4 Information Rents

These are cost relating banks' ability extraction of their customers within their lending practices. Padilla and Pagono (1997) in their two-period model indicated that for banks having private information about the customers, informational advantages give the banks power over their customers leading to generation of hole-up problem. For that reason the banks are likely to charge predatory rate to cushion them in the future. Borrowers on the other hand push for compromised payment transactions resulting to possibilities extended maturity periods, high cost of getting credit and eventually possibility of crunch of the credit market and sector in general.

2.3.5 Macroeconomic Variables

The variables used to capture macroeconomic factors are GDP, cost of production and inflation rate. Increased economic activities have thirsted demand for loans pushing for cost of loans (rate of interest) high. Both variables, positive as well as negative characters have been observed. Additionally, the policy rate which is the Central Bank rate (CBR) is included as a monetary indicator to capture the effect of monetary policy.

2.4 Review of Empirical Studies

Akerlof (1970) asserted that adverse selection indicates differs qualitatively credit seekers. Leland and Pule (1977) observed that financial markets and providers on the

other hand prefer non-classified credit seekers as mechanism and techniques of assessing their potentiality by selectively analyzing all available information. Challenges of selection are as a result of attitude and quality applicant capacity deemed submit high quality project with insufficient information. Pagano and Jappelli (1993), developed the model on adverse selection notes sharing essential information enhances size and numbers credit consumers, decreases possibilities default, decreased interest rates lead to growth in credit market.

When banks act as local monopolists, there exists an instance reduction in lending, and further increases banks' of price discrimination and related costs to classified and non-classified borrowers. Competitive credit markets arise when lending institutions are opted to increase activities due the bank's inadequacy to charge more interest from their customers due the shared information. Application of moral hazard means lending and borrowing of credits constitutes to extend controlled funds of the financial provider Pauly (1968).

Credit disciplinary effect of credit bureaus arises only from the exchange of negative information Padilla and Pagano (1997). Negative information about past defaults generates financial and social stigma due to classification of such borrowers. Sharing white information and simultaneously attenuating adverse selection is attributed to decrease the disciplinary effect. Purely, the significant backing of sharing of black and white information is associated with benefits relative to the market, moral hazard and adverse selection.

Studies have shown that information sharing acts as a prudent incentive to motivation borrower to promptly pay their loans since they well aware that either classification and possible blacklisting of identified defaulters. Classified of credit borrowers will thus lead

to reduced external finance Klein, (1992). Locally, application of CISs decreases asymmetry of information and monopoly lenders on credit applicants, thus reducing the extra rents that lenders extend to their customers and credit consumers. Beck, Getenga et al. (2010) assessed the stability, efficiency, and outreach of Kenya's banking system, using aggregate, bank-level, and survey data. The study examined data on average lending rates, deposit rates, loan provisions, tax rates and operating costs.

Kipyegon (2011) studied credit information sharing and bank performance in Kenya. A case study of Kenya Commercial Bank was done whereby a sample population of 4 branches was used. The study focused on four selected KCB branches, and a sample of 69 employees in all the branches was randomly chosen. The researcher used the Spearman's Correlation Coefficient to analyze quantitative data. Other data was subjected to content analysis.

The study established that complete information about payment on the borrowers characteristic helps the banks to estimate their chance of recovering the loans is 50% , those who strongly agreed is 36.4%, those who were uncertain are 13.6%. This was therefore interpreted to mean that when bank have information concerning the payment of a borrower, then they can use such past information to calculate on their chances of recovering such loans from them. Therefore it is vital that the bank have at least some information about borrowers' past borrowing and repayment habits. The study also established that when the banks gets quality information about the borrowers' credit history, it will help the bank to assess its risk princely and also reduce on the otherwise search cost history of the borrower since it will be readily available from credit bureaus.

The study further established that as banks share information about the loan applicants, they will be able to predict the chance of the borrower to repay the loans since the one

who have good credit report will certainly continue to keep the good record and the one who have bad report might have the high chance of still defaulting on the payment. It also showed that good and timely report of the borrower will surely enable him or her to get loan at ease and at a lower rate of interest. This is because bank is certain about the repayment of the borrower and therefore charges low rate due to the fact that the rate of default is minimal.

Aduda et al. (2012), in an explanatory study postulated distinct relationship between credit scoring by Kenyan banks and access to credit by SMEs in Kenya. His studies centered on registered and licensed commercial banks in Kenya as per central bank database as at December 2009 standing at 43. The study drew conclusions that there is relationship between credit score and access of credit by small and medium enterprise. It recommended that banks need to apply various credit assessment tools and methods before availing loans to SME applicants to improves the credit scoring of banks.

Ngugi (2012) Sample population of the study consisted of all 44 banking institutions registered and operational in Kenya under the banking Act. The study recommended that other institutions to be listed in the CRB data base example Savings and Credit Co-operative Societies, Higher Education Loans Board among others. In addition the study recommended both “Black” and “White” information be made mandatory to be shared in order to make the information sharing beneficial to all stakeholders. The study found significant dissimilarities on the reports obtained from credit reference bureaus and bank. Comparison too was analyzed on the performance of classified loans before, during and after the implementation of shared credit applicants data indicated decline of classified loans.

Nyangweso (2013), in the study investigated effects loan performance and credit information in where time series empirical were used by the researcher to examine their relationship. The study concluded positive correlation upon application reports requested from operating commercial banks.

Other conclusions drawn on performance of loans are measured by rates of default is associated to sharing credit information sharing, rate of lending and total advances loans by lenders. These conclusions are reinforced by Kipchumba (2013), Gitahi (2013), Otworu (2013), Ochola (2012), Kioko (2012) and Wario (2014)

2.5 Chapter Summary

Theories explored in the study of credit information sharing on performance of NDTs were majorly information asymmetry and theories of financial intermediary have been widely discussed by various researchers. Empirical studies by Japelli and Pagano (2002) showed that information sharing reduces adverse selection enhance credit beneficiaries to honour the payments accordingly. According to Love and Myleko (2001), Galindo and Miller (2001) shown that credit is more available as the beneficiaries and providers of credit share credit information from both public and private registries. Determinants of information sharing by credit unions have been widely researched. It is argued that sharing of positive information allow creation “reputation collateral” among debtors.

The study notes that several studies have been carried on many areas on non-performing asset/loans in Kenya; but none of these studies has explored more on performance of NDTs. The study was undertaken to fill the knowledge gap by examining the effect of credit information sharing on performance level of Non-Deposit Taking SACCOs in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology that will be adopted in this study and provides a general framework for this research. The chapter defines details of the research design, target population, sample and sampling procedures, description of research instruments, validity and reliability of instruments, data collection procedures, data analysis techniques and ethical considerations while conducting the study.

3.2 Research Design

This study adopted a descriptive research design. Descriptive design explains the relationship between two or more variables (Mugenda 2009). Thus the research design is to existence relationship underlying the effects of credit information sharing on performance of Non-Deposit Taking Saccos.

3.3 Population and Sampling

The target population for this study will be all credit managers in 53 NDTs registered and supervised by the commissioner of cooperative located and operated in Nairobi County between 2010 – 2014.

3.4 Data Collection

The study used questionnaires as major data collection instruments. The instrument was used inclusively for the collection of primary data. The instrument was strongly believed it accommodate and reach large respondents in short times, providec respodence adequate time responding to items, it too offered element of high level

confidentially (security) of the respondent and finally it is an objective method since biased personal characteristics are minimized (Owens, 2002).

3.5 Data Analysis

The researcher analyzed data using a multivariate regression. The dependent variable in this study was Performance of NDTs computed as total non-performing loans/total loans whereas the independent variables are credit information sharing represented by the no reports (monthly) requested by Non Deposit Taking SACCOs, loan lending volume represented by the opening loans plus addition for the year/total loans and advances, Investment decision represented by the level of management and terms of investment, Loan defaulting rate and represented by value of no-performance/cumulative value of loans and advances and credit registry reports represented by the frequency of submitted reports to credit reference bureau.

3.8. Data analysis model

The following multivariate regression model was used to analyze the data:

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

Where; **Y** represents Performance of NDTs computed as total non-performing loans/total loans and advances. **α** represents Constant of the regression model, **β_0 to β_5** represents coefficient of variables, **X1** represents credit information sharing represented by the no reports (monthly) requested by Non Deposit Taking SACCOs, **X2** represents Loan lending volume represented by the opening loans+ addition for the year/total loans and advances, **X3** represents Investment decision represented by the level of management and terms of investment, **X4** represents Loan defaulting rate and represented by value of no-performance/cumulative value of loans and advances, **X5** represents Credit registry

reports represented by the frequency of submitted reports to credit reference bureau and ϵ represents error/disturbance term. Data collected was analyzed using Statistical Package for Social Sciences (SPSS). Descriptive statistics such as frequency and percentages were generated to present the quantitative data in form of tables and graphs based on the major research questions.

3.5.2 Test of Significance

The error term will represent all the other variables other than the ones under study that influence the performance of NDTs in Kenya. To test the strength of the model the researcher will perform analysis of variance (ANOVA). On extract ANOVA table indicate the researcher will look the significance value by testing at 95% confidence level and at 5% significance level.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND FINDINGS

4.1 Introduction

This chapter contains data analysis and interpretation of the findings. The objective of this study was to investigate the effect of credit information sharing on performance of NDTs in Nairobi County. Useful responses were obtained from respondents implying a good and reliable response rate. The data was analyzed using descriptive statistics and measured using means, standard deviations, frequencies and percentages'. The analyzed data was then depicted using frequency tables, bar charts and pie charts.

4.2. Data presentation

Table 4.2.1 Respondents Position in the SACCO

		Frequency	Percentage	Cumulative Percentage
Valid	Management	17	51.5	51.5
	Employee	16	48.5	100.0
Total		33	100.0	

Sources: Researcher, (2016)

From the analysis of the respondent's position in the SACCO it was found that most of the respondents work under management with a rating of 51.54% while 48.5% of the sampled respondents work under middle and lower level categories.

Figure 1

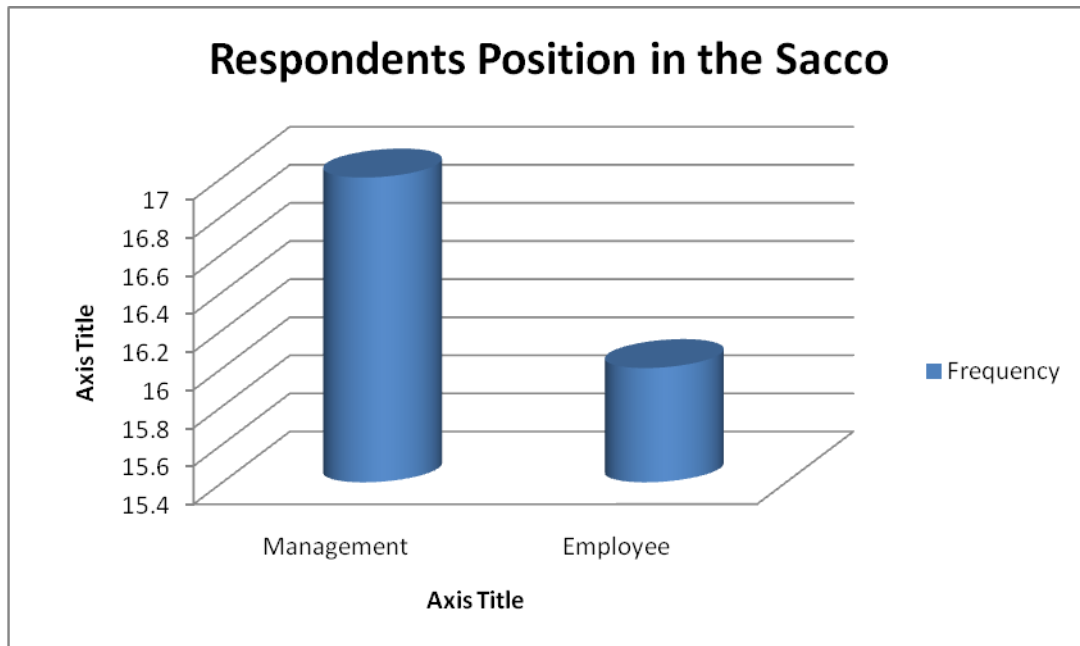


Table 4.2.2 Classification of the SACCO

	Frequency	Percentage	Cumulative Percentage
Valid Deposit Taking (DTs)	10	30.3	31.2
Non Deposit Taking (NDTs)	13	39.4	71.9
Both (DTs & NDTs)	9	27.3	100.0
Total	33	100.0	

Sources: Researcher, (2016)

From the analysis of the respondent's classification of the Sacco, it was revealed that most of the sampled SACCOs are classified under deposit taking and non-deposit taking

Sacco with a rating of 30.3% and 39.4% respectively while 27.3% of the respondents operate as both Non-deposit and deposit taking SACCOs.

Figure 2

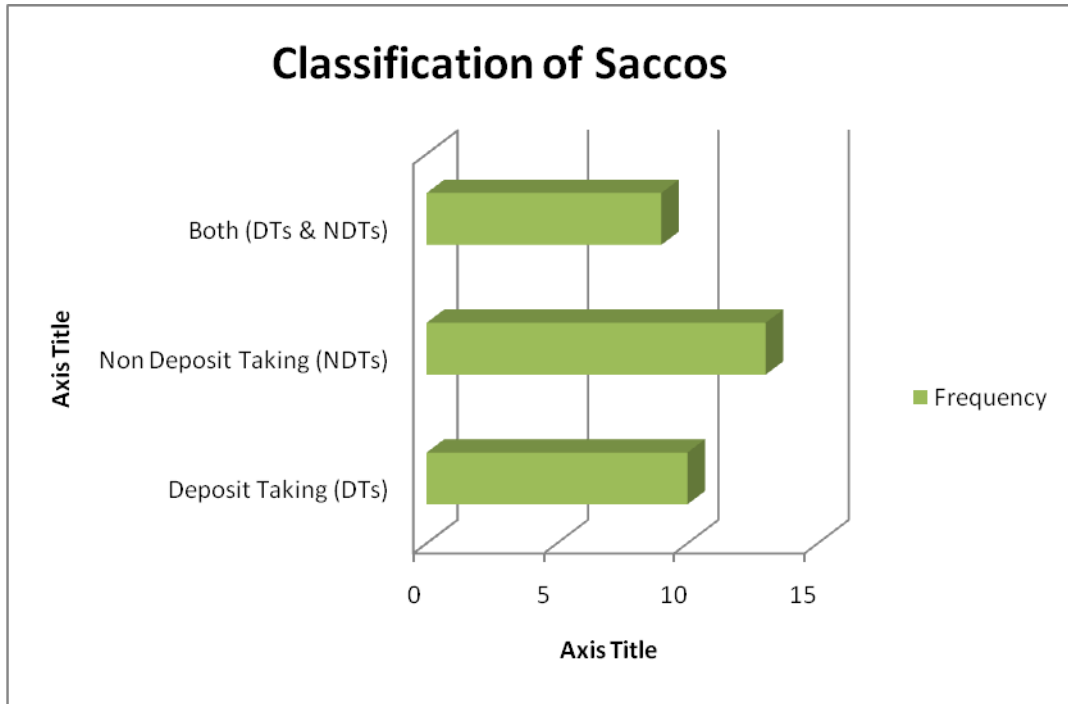


Table 4.2.3 Information Sharing Mechanism

		Frequency	Percentage	Cumulative Percentage
Valid	Yes	32	97.0	97.0
	No	1	3.0	100.0
Total		33	100.0	

Sources: Researcher, (2016)

From the analysis of the information sharing mechanism, it was clearly revealed that most of the SACCOs sampled share their credit information on timely basis with a rating of 97%.

Figure 3

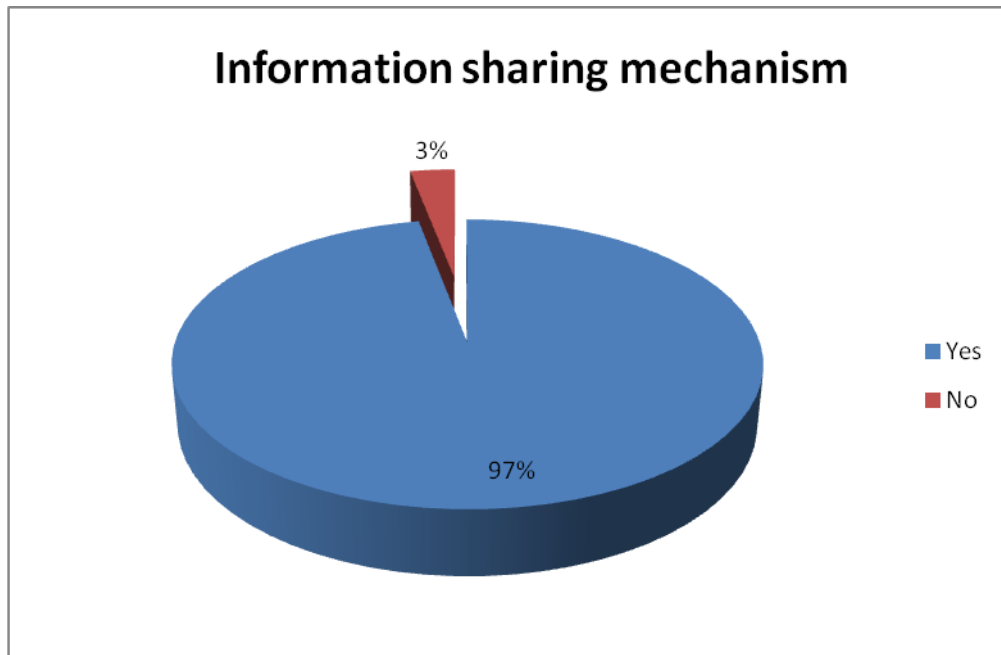


Table 4.2.4 Frequency of receiving information

		Frequency	Percentage	Cumulative Percentage
Valid	Less often	5	15.2	15.2
	Often	4	12.1	27.3
	Fairly Often	10	30.3	57.6
	Very Often	14	42.4	100.0
	Total	33	100.0	

Sources: Researcher, (2016)

From the analysis of the SACCOs frequency of receiving information, it was clearly found that credit information is received fairly often and very often with a rating of 30.3% and 42.4%. 15.2% and 12.1% of the sampled respondents agree that less often and often they do receive credit information frequently.

Figure 4

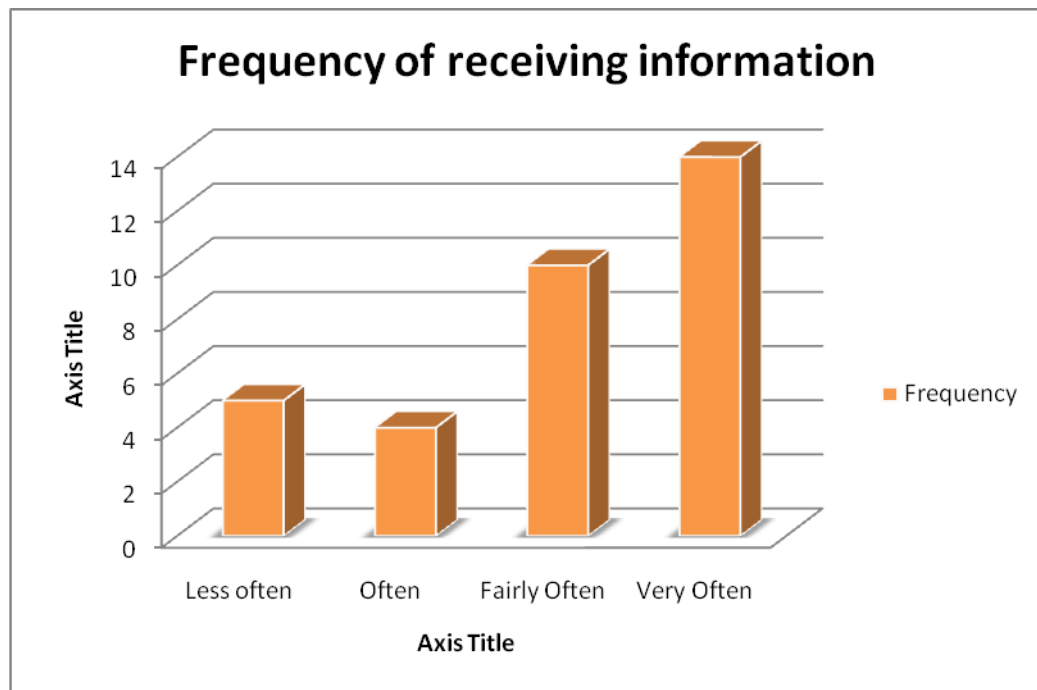


Table 4.2.5 Registration by SASRA

		Frequency	Percentage	Cumulative Percentage
Valid	Yes	23	69.7	71.9
	No	9	27.3	100.0
	Total	32	97.0	
Total		33	100.0	

Sources: Researcher,(2016)

From the analysis of the SACCOs registration by their respective authority, it was found that 69.7% of the sampled deposit and deposit taking individuals are already registered with SASRA with 27.3% of those sampled having not been registered with SASRA.

Figure 5

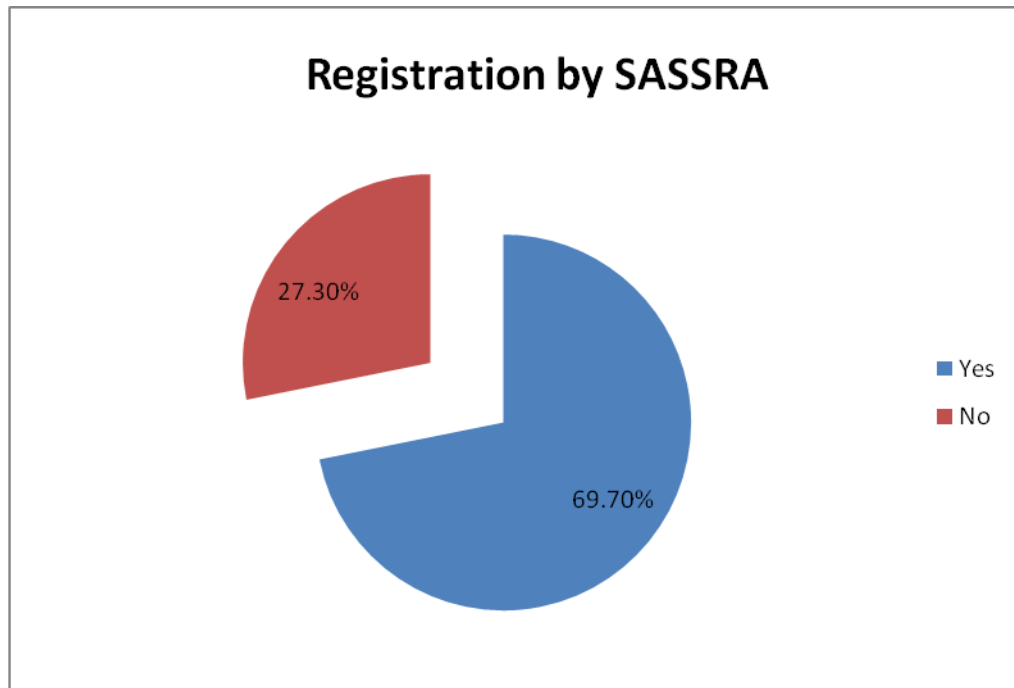


Table 4.2.6 Registration by CRB

	Frequency	Percentage	Cumulative Percentage
Valid Yes	25	75.8	75.8
No	8	24.2	100.0
Total	33	100.0	

Sources: Researcher, (2016)

From the analysis of SACCOs registration with CRB it's very clear that most of the sampled respondents are already registered with CRB with a rating of 75.8% while 24.2% of the respondents having not been registered with CRB.

Figure 6

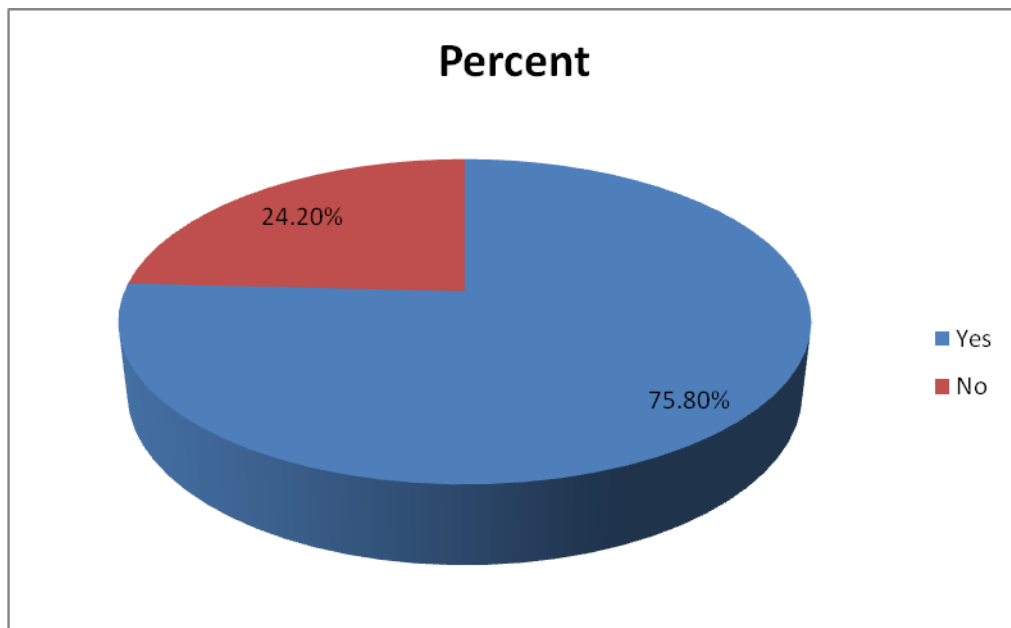


Table 4.2.7 Period of time in the institution

	Frequency	Percentage	Cumulative Percentage
Valid Less than 2 Years	7	21.2	21.2
2 - 5 Years	15	45.5	66.7
5 - 8 Years	6	18.2	84.8
9 - 13 Years	5	15.2	100.0

	Frequency	Percentage	Cumulative Percentage
Valid Less than 2 Years	7	21.2	21.2
2 - 5 Years	15	45.5	66.7
5 - 8 Years	6	18.2	84.8
9 - 13 Years	5	15.2	100.0
Total	33	100.0	

Sources: Researcher, (2016)

From the analysis of the respondent's number of the years they have worked with their respective institution, it was found that 45.5% of the respondents have worked between 2-5 years while 21.2% have worked for less than 2 years. 33.4% of the respondents revealed that they have worked with their respective institution between 5-13 years.

Figure 7

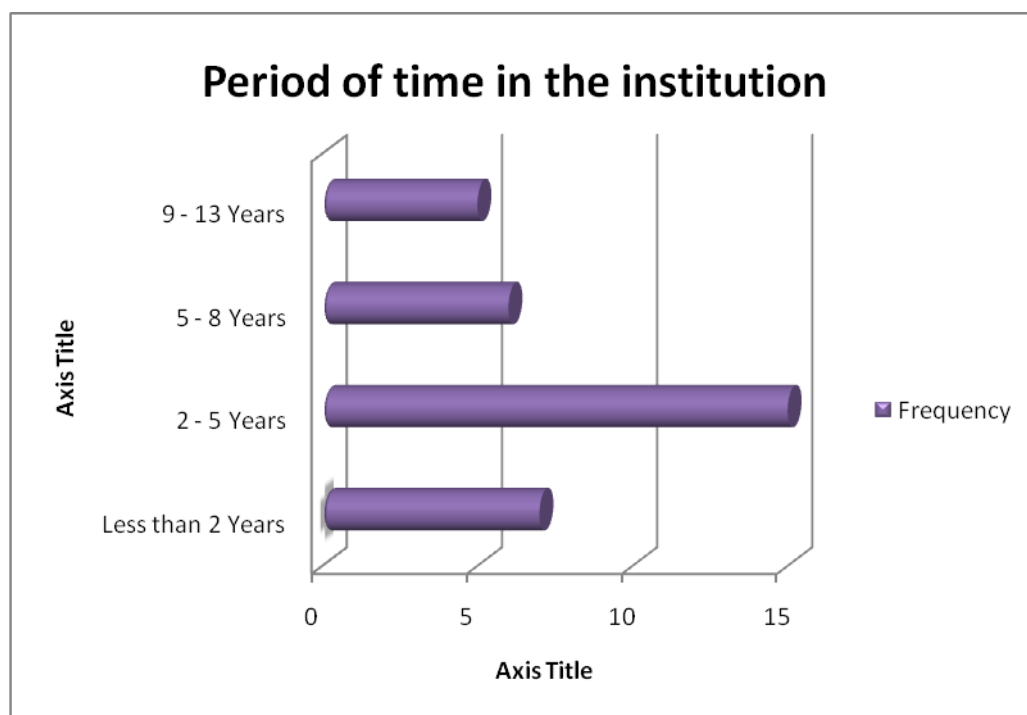


Table 4.2.8 Level of Education

	Frequency	Percentage	Cumulative Percentage
Valid Others	1	3.0	3.0
Diploma	8	24.2	27.3
Bachelors	16	48.5	75.8
Masters	8	24.2	100.0
Total	33	100.0	

Sources: Researcher, (2016)

From the analysis of the respondents' level of education, it was found that most of the sampled respondents have undergraduate and post graduate education with a rating of 72.7% while 27.2% of the sampled respondents have diploma level education and below.

Figure 8

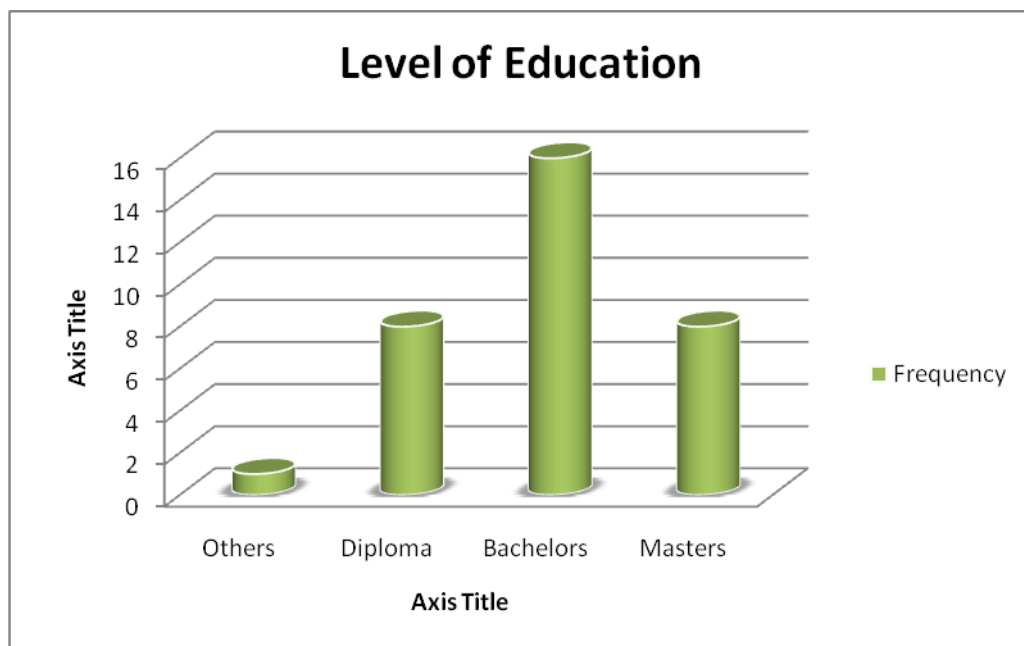


Table 4.2.9 To examine the effects of credit information sharing on lending volumes on performance of NDTs in Kenya

	Minimum	Maximum	Mean	Std. Deviation
Effect of information sharing on borrowers	1.00	4.00	3.0606	.93339
Information Sharing on Lending Volume	1.00	4.00	3.0000	.61237
Customer Consideration of Interest Rates	1.00	4.00	2.6364	.82228

Sources: Researcher, (2016)

From the analysis of the credit information sharing on lending volume and performance of non-deposit taking SACCOs, it was found that effects of information sharing, on lending volumes was moderately rated by sampled respondents with customers consideration of interest rates was least rated by involved participants.

Table 4.2.10: To examine effects of credit information on investment decisions on performance of NDTs in Kenya.

	Minimum	Maximum	Mean	Std. Deviation
Frequency of receiving security updates	1.00	5.00	2.8750	.79312
Negative information on punishing defaulters	1.00	4.00	2.6875	.73780
Influence of lenders & entrepreneurs	1.00	4.00	2.8788	.54530
Valid N (listwise)				

Sources: Researcher, (2016)

From the analysis of the influence of credit information on investment decisions on performance of Non- deposit taking Sacco, the findings revealed that frequency of receiving security updates, negative information on punishing defaulters and influence of lenders and entrepreneurs.

Table 4.2.11: Has your SACCO encountered loan defaulters

	Frequency	Percentage	Cumulative Percentage
Valid Yes	26	78.8	78.8
No	7	21.2	100.0
Total	33	100.0	

Sources: Researcher, (2016)

Table 4.2.11 revealed that most of the sampled SACCOs have encountered loan defaulters with a rating of 78.8% while 21.2% have not encountered defaulters according to the findings of this study.

Figure 9

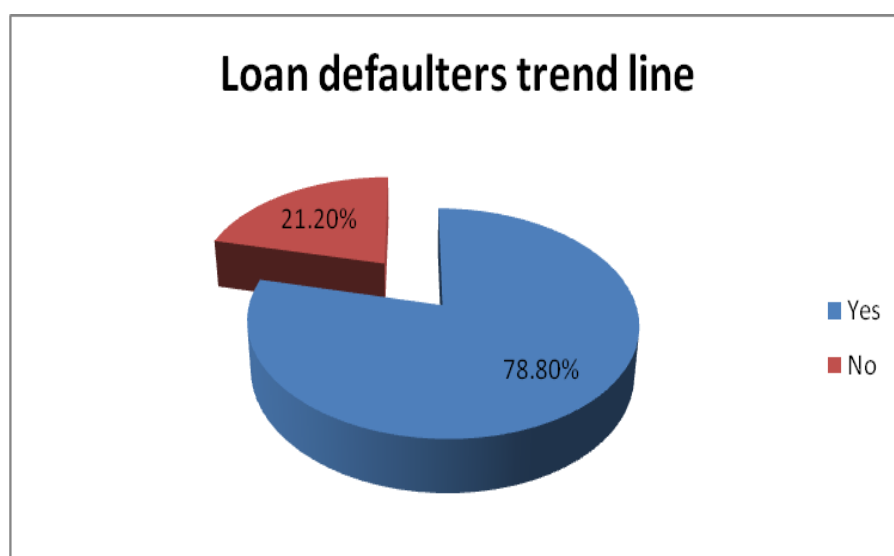


Table 4.2.12: Has credit information sharing reduced the portfolio of Non-performing loan?

	Minimum	Maximum	Mean	Std. Deviation
Extent to which non-Performing loans reduced	1.00	4.00	3.0323	1.07963
Valid N (list wise)				

Sources: Researcher, 2016

The sampled respondents agreed that credit information sharing reduced the portfolio of Non-performing loan with a moderate rating.

Table 4.2.13: Has information sharing between NDTs increased or decreased competition?

	Minimum	Maximum	Mean	Std. Deviation
Effects on market competition and surpluses	1.00	4.00	2.9355	.77182
Valid N (listwise)				

Sources: Researcher, (2016)

From the analysis of credit information sharing between NDTs, increase or decrease the degree of market competition and the surplus enjoyed by consumers, it was found that most of the respondents moderately have increased the degree of market competition and surplus.

Table 4.2.14 Time basis of assessing Effects & Efficiency of CCR

		Frequency	Percentage	Cumulative Percentage
Valid	Monthly	7	21.2	23.3
	Quarterly	10	30.3	56.7
	Half Year	3	9.1	66.7
	Yearly	10	30.3	100.0
	Total	30	90.9	
Total		33	100.0	

Sources: Researcher, 2016

From the analysis of the time basis for assessing effects and efficiency of CCR it was found that most of the sampled respondents do their assessments on quarterly and yearly basis with a rating of 30.3% while 21.2% and 9.1% do their assessments on monthly and half yearly respectively.

Table 4.2.15 To examine effects of credit information sharing on credit registries on performance of NDTs in Kenya

	Minimum	Maximum	Mean	Std. Deviation
Accessibility of Credit Bureaus	1.00	4.00	2.9000	1.02889
How Regulatory Compliance is Rated	1.00	4.00	1.8636	.99021
How Business Continuity is rated	1.00	5.00	3.0000	1.09545
How Company Reputation is Rated	1.00	4.00	2.0500	1.31689
How Internal Policy Compliance is Rated	1.00	5.00	2.0000	1.31656
How Economic Conditions are Rated	1.00	5.00	4.5333	1.12546

Protection of confidential information & privacy	2.00	4.00	3.0000	.56796
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Sources: Researcher, (2016)

From the analysis of influence of credit information sharing on credit registries on performance of Non-trading in Kenya, the results revealed that economic information sharing was greatly rated at 4.5333 while accessibility of credit bureaus, business continuity rated at 2.9000, 3.000 and 3.000 respectively. Protection of confidential information and privacy was moderately rated by respondents. Regulatory compliance, company reputation and internal policy compliance was least rated by sampled participants in this study.

Table 4.2.16 Effects of credit sharing on non-deposit taking SACCOs

	Minimum	Maximum	Mean	Std. Deviation
Influence on Loan Volume	2.00	4.00	3.2188	.65915
Influence on Investment Decision	2.00	4.00	3.2581	.68155
Influence on Loan Defaulting Rate	1.00	4.00	3.1250	1.00803
Influence on Credit Registry Reports	1.00	4.00	3.0625	.80071
Valid N (listwise)				

Sources: Researcher, (2016)

Table 4.2.16 above revealed that credit information influence on loan volume, investment decisions, loan defaulting rate and influence on credit registry reports were moderately rated by sampled participants in this study. Credit information sharing on the

loan defaulter's rate has the highest standard deviation of 1.00803 with credit information sharing on loan volume has the lowest standard deviation of 0.65915.

4.3 Regression Analysis

In addition to descriptive statistics, the study did a multiple varied regression model to which the findings and discussed below:

Table 4.3.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.551	.603	.018	.12629

Source: Researcher, (2016)

Table above indicates that there is an R^2 value of 60.3%. This value indicates that the five independent variables explain 60.3% of the variance in the resource allocation. It's very clear that these independent variables contribute to a large extent to the resource allocation level by donors. It is therefore sufficiently to conclude that these variables significantly influence resource allocation to NGOs given the unexplained variance is only 39.7%.

Table 4.3.2 Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.090	6	.015	2.943	.0498
	Residual	.207	13	.016		
	Total	.298	19			

Source: Researcher, (2016)

Given 5% level of significance, the numerator df =6 and denominator df =13, critical value 2.74, table 4.5 shows computed F value as 2.943. This confirms that overall the multiple regression model is statistically significant, in that it is a suitable prediction model for explaining how the selected independent variables affects the performance of NDTs.

Table 4.3.3 Regression Model

Model	Un- standardized Coefficients		Standardized Coefficients	Si g.	95.0% Confidence Interval for B	
	B	Std. Error	Beta		Lower Bound	Upper Bound
Constant	.541	.001	.213	.014	.016	.041
Credit information sharing	.613	.048	.379	.027	-.040	.016
Loan lending volume	.187	.122	-.426	.047	-.451	.047
Investment decision	-.033	.023	.443	.069	-.016	.083
Loan defaulting rate	.522	.054	-.098	.036	-.138	.035
Credit registry reports	.421	.012	.004	.031	.042	.064

Source: Researcher, (2016)

Using a significance level of 5%, any independent variable having a significant value greater than 5% is considered not statistically significant. This study found that credit information sharing, loan lending volume, loan defaulting rate to statistically significant with investment decisions and credit registry reports with significance of more than 5% not statistically significant. The general regression model was given as follows:

$$Y=0.541+ 0.613X_1+ 0.187X_2 - 0.033X_3 + 0.522X_4 + 0.421X_5 + \mu$$

4.4 Summary and interpretation of findings

Credit information is the main stream in modern finance information and economy. Credit information sharing is considered an important factor by financial, non-financial, the regulator and more the government enhance risk management practice and improve access to credit to borrower and lenders. SACCOs and financial institutions consider information sharing a vital instrument in credit appraisal for consideration for a loan or advances since such appraisal reduces adverse selection and moral hazard via information asymmetry.

Jappelli & Pagano (1999) study information sharing is consistent with this study since CIS in credit industry works as a discipline that improves borrowers incentive to meet their PMT as they fall due and enhances pool of borrowers. Therefore the application of CIS shall in effect reduce the rate of default leading low portfolio of NPL in SACCOs. From the study NPL reduced with indication of a mean of 3.0323 with standard deviation of 1.07963.

Further, from this study it can be deduced that CIS introduction in the Kenyan credit industry has observed immense benefits to SACCOs and financial institutions at large. However, the same is seen as a competition element based on the shared rate of interest,

but in the short CIS might be observed a completion scheme but in the long run CIS will improve the services of the SACCOs more so on the appraisal ability and the credit worthiness on the customers.

In theory and practice, information sharing is to share customer's history but the same since been used to check lending interest rates. However, from this study interest was rated the least an indication that despite existence of information sharing was not interest rates mechanism device. This study is supported by Kimasa & Kwasira (2014) that credit market are in transition avenue to benefit from the positive information sharing with both public and private CRB freely or with minimum cost avail customer's information .

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter tends to give the summary of the results in this study, conclusions and recommendations for practice and areas explicit extensive research.

5.2 Summary

The objective of this study was to investigate the effect of credit information sharing on performance of non-deposit taking savings and credit cooperative societies in Nairobi County. From the analysis of the respondent's position in the SACCO it was found that most of the respondents work under top level management, middle and lower level categories who's SACCOs classified under deposit taking and non-deposit taking Sacco. The findings also revealed that SACCOs sampled share their credit information on timely basis fairly often and very often.

The results also indicated that most of the deposit and non-deposit taking individuals are already registered with SASRA with insignificant number having not been registered with SASRA. From the analysis of the respondent's number of the years they have worked with their respective institution, it was found that most respondents have worked between 2-5 years while others less than 2 years with most of them having undergraduate and post graduate education.

Finally, credit information sharing on lending volume and performance of non-deposit taking SACCOs, it was found that the effect of information sharing on lending volume was moderately rated by sampled respondents with customers consideration of interest been highly rated by sampled respondents in this study.

5.3 Conclusion

This study concludes that credit information on investment decisions on performance of Non- deposit taking Sacco is mainly influenced by the following factors frequency of receiving negative information on punishing defaulters and influence of lenders and entrepreneurs with most of the sampled SACCOs having encountered loan defaulters with a rating. The results also showed that credit information sharing reduces the portfolio of Non- performing loan with a moderate performance.

Credit information sharing between NDTs to increase or decrease the degree of market competition and the surplus enjoyed by consumers, it was found that most respondents moderately have increased the degree of market completion and surplus on time basis for assessing effects and efficiency of CCR. This study also concludes that credit registries on performance of Non-trading in Kenya economic information sharing was greatly rated by sampled respondents while accessibility of credit bureaus, business continuity and protection of confidential information and privacy was moderately rated by respondents. Regulatory compliance, company reputation and internal policy compliance was least rated by sampled participants in this study.

The study further concludes that credit information sharing and performing NDTs within Nairobi County are positively associated. Study further observed with prudent shared applicants data improves among financial institutions, prudent appraisal and subsequent advancement, lowers the banks level of risk, acts as borrowers discipline against defaulting and reduction in borrowing cost. In addition it was observed positive relations of non - performing loans to total loans improved resulted on the introduction of credit information sharing amongst financial institutions NDTs included.

5.4 Policy Recommendations

Financial management strategies should be set aside to address key critical financial decisions arising in the SACCOs particularly developing good financial management technique to provide adequate responses to challenges and problems by focusing on internal business processes and internal controls.

SACCOs should in addition have clear framework on how credit decisions are made and the protocol to be followed to make sure the right decisions are made to meet the benefit of the investors and maintain the SACCOs going concern. This will enable to minimize any conflict of interest which might lead to disservice or dissatisfaction.

Regarding that there is no optimal capital structure acceptable to organization, the capital structure mix influences the performance of Sacco's direction to large extent. The impact depends on the SACCOs mix of debt and equity. This study recommends that before the SACCO decides to finance its operations fully by use of debt, it should assess its general and specific effect on Sacco's credit worthiness.

5.5 Limitations for the Study

Limited and resources were considered major constraints, during all stages of the research. Time and finance during the process of data collection was inevitable and thus only 33 SACCOs involved in the study.

Access of information and data in the course of study was limited especially the secondary. This was mostly due to the unwillingness of the interviewees filling the questionnaires. Due to the forgoing the researcher opted for primary data which proved difficult and challenging to edit code and analyze.

5.6 Areas for Further Research

This kind of research requires more time for the collection adequate information and analysis to incorporate more variables, factors and NDTs which will indicates the performance of NDTs.

Since the study more of primary data and information the researcher recommends future research project to apply secondary data since analysis is fast, accurate and reduces biases that would otherwise be experienced when using primary data.

In addition, a case study is preferred to be conducted based on one of the SACCOs in Kenya where the researcher evaluate the results to test the consistency and uniformity of both past and current research.

This study also suggest that further study especially a comparative study can be conducted by comparing the factors affecting the financial performance of SACCOs from different geographical areas and remedies for the same and more advanced analysis model employed to show the exact relationship and differences on the performance such as t-test, chi-square and correlation analysis which captures many factors possible.

REFERENCES

- Aduda, J, Magutu, P., & Githinji, M. (2012). The Relationship between Credit Scoring by Commercial Banks and Access to Credit by Small and Medium Enterprises in Kenya. *International Journal of Humanities and Social Science*.
- Akerlof, G. (1970). The Market of Lemons: Quality Uncertainty and the Market Mechanism. *Journal of Economics*, 84, 488-500.
- Armstrong, C. S., Barth, M. E., Jagolinzer, A. D., & Riedl, E. J. (2010). Market reaction to the adoption of IFRS in Europe. *The accounting review*, 85(1), 31-61.
- Beck, T., Cull, R., Fuchs, M., Getenga, J., Gatere, P., Randa, J. and Trandafir, M., Banking Sector Stability, Efficiency, and Outreach in Kenya. *World Bank Policy Research Working Paper 5442*.
- Bennardo, A., Pagano, M. & Piccolo, S. (2009). Multiple Bank Lending, Creditor Rights and Information Sharing, Working Paper, CEPR
- Bhattacharya, R., Devinney, T.M., & Pillutla, M.M. (1998). A Formal Model of Trust Based on Outcomes, *Academy Of Management Review* (23) pp 459-472.
- Borg, W. R., & Gall, M. D. (2003). *Educational Research: An Introduction* (Fifth ed.). New York: Longman.
- Brown M., & C. Zehnder (2006). Credit reporting, Relationship Banking, and Loan Repayment, Swiss National Bank Working Paper 2006-3.
- Calomaris, C. & G. Hubbard. (1990). Firm Heterogeneity, Internal Finance, and Credit Rationing. *The Economic Journal* 100, pp. 90-104.
- Ekumah, E. K., & Essel, T. (2003). Information is power: *The Problem with Credit Accesibility in Rural Banks In Ghana*. University of Capetown.

- Faulkerender, M., Petersen, M, A (2006). Does the source of capital affects capital strure?
Review of financial studies 19(1), 45-79.
- Jaeger, R. M. (1988). *Survey Methods in Educational Research*. Washington D.C.: Brooking Institution Press.
- Jappelli T., & M. Pagano (2006), "Role and Effects of Credit Information Sharing," in *The Economics of Consumer Credit*, edited by G. Bertola, R. Disney and C. Grant, MIT Press: Cambridge, Massachusetts, 347-371.
- Jappelli, T., & M. Pagano (2002), "Information Sharing, Lending and Defaults: Cross-Country Evidence," *Journal of Banking & Finance* 26, 2017-45. *Journal of Finance* 43(5).
- Jensen, M.C., & Meckling, W.H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, *Journal of Financial Economics* (3:4).
- Kaplan, R. & Norton, D. (1992). The balanced scorecard: measures that drive performance. Harvard Business Review.
- Kipchumba, G. (2013). The Relationship between Credit information Sharing and Loan Book Size and Non-Performing Loans of commercial Banks in Kenya. *Unpublished MBA Research Paper*, University of Nairobi.
- Kipyegon, L. R. (2011). Relationship between Credit information Sharing and Performance of Commercial Banks in Kenya. *Unpublished BBAM Research Paper*, Makerere University.
- Klein, D. B. (1992). Promise Keeping in the Great Society: A Model of Credit Information Sharing, *Economics and Politics* 4(2), 117-36.
- Klein, D. B. (1992). Promise keeping in the great society: A Model of Credit Information
- La Porta, R., Lopez de Silanes, F., Shleifer, A., & Vishny, R. (1999). Investor protection and corporate valuation. NBER Working Paper Series, 7403.

- Leland, H. E. & Pyle, D. H. (1977). Informational asymmetries, financial structure and financial Intermediation. *Journal of Finance*, 32(2), 371–87.
- Lewicki, R.J., & Bunker, B.B. (1994). Trust in Relationships: A Model of Trust Development and Decline Max M. Fisher College of Business, Ohio State University.
- Mayer, R.C., Davis, J.H., and Schoorman, F.D. (1995). An Integrative Model of Organizational Trust, *The Academy of Management Review* (20:3).
- Miller M. J. (2003). Credit Reporting around the Globe, in M. J. Miller (ed.), *Credit Reporting Systems and the International Economy*. Boston: MIT Press.
- Mugenda, O. M. & Mugenda, A. G. (2003). Research Methods. *Nairobi, African Centre for Technology Studies Press*. Ngugi, R. (2001). Banking sector interest rate spread in Kenya: *Kenya Institute for Public Policy Research and Analysis*.
- Ngugi, M. W. (2012). The impact of Credit Information Sharing on Credit Risk of Commercial Banks in Kenya. *Unpublished MBA Research Paper, University of Nairobi*.
- Nyangweso, J. (2013). Relationship between Credit information Sharing and Loan Performance - case of commercial Banks in Kenya. *Unpublished MBA Research Paper, University of Nairobi*.
- Ogula, P. A. (2005). Research Methods. Nairobi: CUEA Publications.
- Orodho, A. J. (2003). Essentials of Educational and Social Sciences Research Method. Nairobi: Masola Publishers.
- Otwori, C. (2013). The Relationship between Credit Referencing and the Level of Non Performing Loans of commercial Banks in Kenya. *Unpublished MBA Research Paper, University of Nairobi*.
- Owens, L. K. (2002). Introduction to Survey Research Design. SRL Fall 2002 Seminar Series. Retrieved May 31, 2013 from <http://www.srl.uic.edu>

- Owino, J., O (2012). The effects of credit information sharing on the cost of credit of commercial banks in Kenya: *Unpublished MBA Research Paper, University of Nairobi.*
- Padilla, A. J., & M. Pagano (1997), “Endogenous Communication among Lenders and Entrepreneurial Incentives,” *Review of Financial Studies* 10, 205-236.
- Padilla, A. J., and M. Pagano (2000), “Sharing Default Information as a Borrower Discipline Device,” *European Economic Review* 44, 1951-80.
- Padilla, A. Jorge and Marco Pagano (1997), «Endogenous Communication among Lenders and Entrepreneurial Incentives,» *The Review of Financial Studies* 10, 1, Winter, 205-236.
- Pagano, M., and T. Jappelli (1993), “Information Sharing in Credit Markets,” *Journal of Finance* 43, 1693-1718.
- Powell, A., N. Mylenko, M. Miller, & G. Majnoni (2004), “Improving Credit Information, Bank Regulation and Supervision: On the Role and Design of Public Credit Registries,” World Bank Policy Research Working Paper 3443.
- Rajagopalan, N., & Zhang, Y. (2009). Recurring failures in corporate governance: A global disease?. *Business Horizons*, 52(6), 545.
- Republic of Kenya (1997). Sessional Paper No. 6 of 1997 on *Cooperatives in A Liberalized Economic Environment*, Nairobi, Government Printer.
- Republic of Kenya (2008), *The SACCO Societies Act 2008*, Nairobi ,Government printers.
- Republic of Kenya (2010), *The SACCO societies –Deposit taking Regulations*. 2010, Government Printers.
- Stiglitz, J. & Weiss, A. (1981). Credit Rationing in Markets with Imperfect Information. *The American Economic Review* Vol. 71, No. 3 (June), 393-410.
- Vercammen, J. (1995). Credit Bureau Policy and Sustainable Reputation Effects in Credit Markets. *Economica* 62, 461-78.

- Vercammen, J. A. (1995). Credit Bureau Policy and Sustainable Reputation Effects in Credit Management Practices by Commercial Banks and Access to Credit by Small and Medium Enterprises in Kenya. *International Journal of Humanities and Social Science*.
- Were, M. and Wambua, J., (2013). Assessing the determinants of interest rate spread of Commercial banks in Kenya: An empirical investigation: *KBA Centre for Research on Financial Markets and Policy Working Paper 01/13*.
- Yun, H. (2009). Choice of corporate liquidity and corporate governance. *Review of financial studies*, 22(4) 1447-1475
- Zairi, M. (1994). *Measuring Performance for Business Results*, Chapman and Hall, London.

APPEDICES

APPENDIX I: QUESTIONNAIRE

Section A: Demographic Information of SACCO

1. Name of your SACCO -----

2. What is your position in the SACCO?
Director () Management () Employee () 51 and above ()

3. What is the classification/operation of your SACCO?
DTs () NDTs () Both DT NDTs ()

4. Does your SACCO have credit information sharing mechanism?
Yes () No ()

5. How often does your institution receive credit information from other credit providers?
Very often () Fairly often () Often () less often ()

6. Is your SACCO registered and supervised by SASRA?
Yes () No ()

7. Is your SACCO registered with any Credit Reference Bureau?

Yes () No ()

8. How long have been working in the institutions?

Less than 2 years () 2-5 years () 5-8 years () 9-13 years ()

9. What is your highest level of education

PhD () Masters () Bachelors () Diploma () Others
specify.....

Section B: To examine the influence of credit information sharing on lending volume on performance of NDTs in Kenya.

10. Sharing credit of information among NDTs will improve the pool of borrowers?

Strongly agree () Agree () Strongly disagree () Disagree ()

11. In the last one year, information sharing has increased volume of lending among NDTs?

Strongly agree () Agree () Strongly disagree () Disagree ()

12. Would you say customer who has been extended loan controls the money of the lending institution and hence does not consider NDT's interest rates

Strongly agree () Agree () Strongly disagree () Disagree ()

13. In your own words, please describe how sharing credit information influences lending

volume.....
.....

14. How do you explain the level of information sharing within the NDT sector in Kenya with regard to borrowing of loan

.....
.....

Section C: To establish the influence of credit information on investment decisions on performance of Non-Deposit Taking Sacco in Kenya.

15. How often do you have information sharing security updates amongst yourselves?

Always () Very Often () Often () Rarely () Never ()

16. Do you think sharing information among NDTs influences their decision to punish loan defaulter results from sharing negative information?

Strongly agree () Agree () Strongly disagree () Disagree ()

17. Information sharing arrangements are often created spontaneously by groups of lenders or individual entrepreneurs, in the form of credit bureaus or of rating agencies.

Strongly agree () Agree () Strongly disagree () Disagree ()

18. Briefly, describe how credit information sharing influences investment decisions within the NDTs

.....
.....

Section D: To determine the influence of credit information sharing on loan defaulting on performance of Non-Deposit Taking Sacco in Nairobi County

19. Are there any situations your SACCO has encountered loan defaulters?

Yes () No ()

20. Do what extend do you think credit information sharing has reduced the portfolio of Non- performing loan? Strongly agree () Agree () Strongly disagree () Disagree () Disagree ()

21. Do you think information sharing between NDTs may either increase or decrease the degree of market competition and the surplus enjoyed by consumers? Strongly agree () Agree () Strongly disagree () Disagree ()

22. Do you think sharing information on loans can influence borrowers to repay their loan? Yes () No ()

Section E: To examine influence of credit information sharing on credit registries on performance of NDTs in Kenya

23. Do you have centralized credit registries?

Monthly () Quarterly () Half year () Yearly ()

24. How often the NDTs assess the effect and efficiency of credit registry?

Yes () No ()

25. Would say that credit bureaus should be open-access, so that any actual or potential lender can access the same information at non-discriminatory costs?

Strongly agree () Agree () Strongly disagree () Disagree ()

26. How do you rate the top factors driving information sharing among NDTs?

Regulatory compliance ()

Business Continuity ()

Company reputation ()

Internal policy compliance ()

Economic conditions ()

27. Do you think credit information provision finds an obvious limit in the set of legal provisions designed to protect confidential information, or individual privacy?

Strongly agree () Agree () Strongly disagree () Disagree ()

28. How do you explain the influence of credit information sharing on credit registries.....

Section F: Summary of the influence of credit sharing on non-deposit taking SACCOs

29. Do what extend do you agree that credit information sharing has influenced the variables:

(a) Credit Information sharing?

Strongly agree () Agree () Strongly disagree () Disagree ()

(b) Loan lending volume?

Strongly agree () Agree () Strongly disagree () Disagree ()

(c) Investment decision?

Strongly agree () Agree () Strongly disagree () Disagree ()

(d) Loan defaulting rate?

Strongly agree () Agree () Strongly disagree () Disagree ()

(e) Credit registry reports?

Strongly agree () Agree () Strongly disagree () Disagree ()

30. Which other variable do you consider does influencing credit information sharing?

.....

31. What is your comment on future of CIS?

.....

.....

APPENDIX II: NON DEPOSIT TAKING SACCOs IN NAIROBI COUNTY

1. Amiran staff Sacco
2. Avenue hospital Sacco
3. Ballot Sacco
4. Balozi Sacco
5. BM Security Sacco Ltd
6. Chui Sacco Ltd 680 Hotel
7. Cic Staff Sacco Ltd
8. Comoco Sacco Ltd
9. Dawa/Sygnenta Sacco Ltd
10. Elimu Sacco Ltd
11. Getrude Hospital Staff Sacco Ltd
12. Helb Sacco
13. Jamii Sacco
14. Jumbo/Jubilee Sacco Ltd
15. Kanisa Sacco Ltd
16. Kasneb Staff Sacco Ltd
17. Kencom Sacco Ltd
18. Kenya Medical Association Sacco
19. Kingdon Sacco Ltd
20. Kmtc workers Sacco Ltd
21. Knec Staff Sacco Ltd
22. Kumbukumbu Sacco Ltd
23. Lenga Tumaini Sacco Ltd
24. Mageso Sacco Ltd
25. Maisha Bora Sacco Ltd
26. Maktaba Sacco
27. Marafiki Sacco Ltd
28. Matibabu Sacco Ltd
29. Mawasiliano Sacco Ltd
30. Mhasabu Sacco Ltd
31. Mtangazaji/Kbc Staff Sacco Ltd
32. Nacico Sacco Ltd
33. Nafaka Sacco Ltd
34. Nairobi Hospital Sacco Ltd
35. Nakumatt Staff Sacco Ltd
36. Nhif Sacco Ltd
37. Nyati/Securicor Sacco Ltd
38. Bunge Sacco Ltd
39. Reli Sacco Ltd
40. Shirika Sacco Ltd
41. Telepost Sacco Ltd
42. Tembo Sacco Ltd
43. Transcom Sacco Ltd
44. Uchumi Sacco Ltd
45. Ufundi Sacco Ltd
46. Umote Sacco Ltd
47. Unga Staff Sacco Ltd
48. Ushuru Sacco Ltd