DETERMINANTS OF LOAN DEFAULTS IN SACCOS IN KENYA: A CASE OF METROPOLITAN NATIONAL SACCO LTD IN KENYA

BY

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTERS DEGREE IN BUSINESS ADMINISTRATIOIN SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

DECEMBER, 2018

DECLARATION

I hereby attest that this research project is my own academic work and has never been presented to any other institution/university other than the University of Nairobi for examination.

Signed ___________________________Date_______________________

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SUPERVISOR'S APPROVAL

This Research project has been submitted for examination with my approval as the University of Nairobi supervisor.

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ACKNOWLEDGEMENTS

I take this opportunity to extend my heartfelt gratitude towards the following individuals whose contributions have made the completion of this research project fruitful. Mr. James Karanja without whose support this work wouldn’t have been possible to undertake. The researcher wish also to extend his sincere gratitude to the University of Nairobi administration through the University library and the staff for enabling him to access the various academic materials used in analyzing and compiling this academic work. All colleagues who offered fascinating encouragements to the researcher mostly during this study. Most of all am much thankful to the Lord for the gift of good health and strength to undertake the academic work successfully on top of the sufficient Grace throughout my studies.

DEDICATION

I sanctify the research work first to my dear parents Mr. and Mrs. Stephen Muia, not forgetting my in-law parents Mr. and Mrs. Charles Nzioka who without holding back have offered me their moral, motivational and financial support.

To my dear wife Ruth, wonderful son Jayden, brothers and sisters who have encouraged me throughout the period of research and finally my supervisor, Mr. James Karanja whom without his support I could not have made it.

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LIST OF ABBREVIATIONS AND ACRONYMS

DTS : Deposit Taking SACCOs

EPS : Earnings per Share

MFI : Micro Financial Institutions

NPLs : Nonperforming Loans

ROI : Return on Investment

SACCOS : Savings and credit co-operative society

SASRA : SACCO society's regulatory authority

SD : Standard Deviation

RBA : Retirement Benefits Authority

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ABSTRACT

This research project gives an analysis of factors determining loan defaults in SACCOs in Kenya. This research work explains in-depth undertaking of loan repayment through stipulation of the background, determinants of loan defaults, firms under survey, research problem, the objectives and significance of the study in chapter one. Chapter two of this academic work explains the theoretical framework, empirical and conceptual framework in addition to a literature review summary of the study carried out on the determinants of loan defaults in SACCOS. Chapter three focuses on the design of the research and identifies the target population of study from which data is collected by use of secondary data collection method. It also outlines the method of collecting data besides the instruments used to undertaken the data collection, consequently explaining how data will be analyzed and presented in order to be of assistance to the user. The secondary data was obtained from relevant literature from various sources majorly from Metropolitan National SACCO Ltd financial statements and reports from SASRA being the umbrella body. In chapter four data was annotated and compiled for precision, evenness, consistency, plenitude and aligned for ease of codification and tabling for a conclusive dichotomy and analysis. This academic work further adopted the use of SPSS cum multiple regression models to analyze the data. The research study finally as highlighted in chapter five, found out that defaulted loans by SACCOS has significantly being on the rise and several determinants affected the loan defaults key among them increased transaction costs and low recovery rate. Therefore, depending on the findings the study recommended that it's procedural for SACCOS to solve the menace of loan defaults and this calls for review on the issue of transaction costs in which they not only need to moderate the transaction fees but should also up their game on loan recovery techniques by recruiting and training professionals.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

As per a research done by Nicolas (2010) default takes place whilst a debtor has not settled his or her legit or contractual responsibilities keeping with the debt agreement, for instance not making a lawful pay back, or infringement of a loan resettlement of the debt agreement. Defaulting a loan is simply neglecting a credit repayment. Default can still take place in the event a borrower is both not willing and not able to pay back the lawful obligation. In corporate finance, in the event of an ailing default, the owners of the debt will normally seek a court order of involuntary liquidation to first close on any security sheltering the debt.

In a survey by Landor and David (2004), default can be of numerous sorts for example debt service default cum technical defaults. Default as a result of subserviced debt occurs whilst the borrower has not made a planned repayment of interest and principal. Technological default takes place when a positive or a negative contract is contravened. With majority debts consisting of corporate long-term securities and financial institution loans, a contract is enjoined in the settlement of the amount owed stating overall quantity becomes reimbursable at the glance of any non-payment.

According to Roubin (2010), other types of defaults are; arranged default which in instances of severe financial debacle, regulators and creditors are advised to presumptively pioneer the meticulous revamping of a government’s budget deficit, still referred to as "controlled default". A default is deemed strategic, while a borrower opts to dodge a payment on a mortgage, regardless of being capable of making bills, that is stated as a planned default. This is regularly done for loans that are on non-recourse, in which the creditor is not in opposition to do anymore claim on the debtor; for instance is a scenario of poor fairness on a non-movable credit facility in general lawful state.

In sovereign strategic default, sovereign debtors such as realms also can opt to dodge a loan repayment, even when they are in a state of doing the payments. The president of Ecuador back 2008 Rafael Correa strategically unperfected on country wide arrears in interest fee, stating that he took into consideration the debt "immoral and illegitimate". Customer default often takes place in lease or mortgage bills, customer credit, or utility bills. Even lack of knowledge (illiteracy)on internet use has been related to extended default, doubtlessly emanating from these families being less in all likelihood to locate their way to the intimate advantages they may be frequently bound to , Louise (2011).

According to Uboun (1998) study, loan provisions by SACCOs are purely based on the savings a member has accumulated before. The loan amount is deemed above or below the savings of the borrowing member. A credit that falls below the member's savings is regarded as sheltered and shielded whereby reimbursement is guaranteed. Facilities that are above the borrower's accumulations ought to be secured and assured by other existing SACCO members as they are unsecure and have no certainty of repayment. Any non-repaid loan facility is deemed delinquent and on that account declared a default. A survey by Steams (1991) discovered that the measure and method used in selecting borrowers plus the quantity and volume of credit awarded to every favorable loanee predisposes the magnifier of loan delinquency. The RBA in Kenya forbids and rules out the usage of borrowers' pension in servicing their financial obligations including outstanding SACCO loans (sec 22 Act NO 3of 1997).

A loan default on the other hand is the failure to repay back the principle amount and the interest thereof. Defaulting occurs when a borrower is either not willing or not in a position to pay his or her obligation when they fall due with the probability of occurrence being attached to liabilities and financial instruments like bonds, loans etc. If a company is not in a position to fulfill its financial responsibilities and obligations then it results into a financial distress.

1.1.1 Determinants of loan defaults

Ahmed (1997) pointed out that the major determinants on the issue of non-loan repayments as; deviation of cash reserve/proceeds of the debtor, loan officers poorly assessing loan applications, persistent laxity with carelessness and unwillingness to eservice a loan. Balogun and Alimib (1988) recognized a lagging culture in dispersing loans, inadequate loans, size of the firm being small, increased rates, poor follow up and farmer's age are some of the major contributors of credit risk. Risk business, huge transactional fees experienced by borrowers when making loan applications, dominance in credit markets occasionally engineered by unauthentic creditors, and rate of interest capping normally subjected to by the state henceforth play a crucial role in accounting for the issues behind defaulted loans.

Oxbridge Writers (2013), factors that lead to non-repayment of loans in SACCOs include, inadequate systems for monitoring loanees, lack of collaterals, time lag experienced between loan application and crediting, failure to use the funds for the intended purpose and poor decision making. Loan default makes it hard to acquire profits and ensure SACCOs progress and growth. The Sacco must come up with efficient ways of reducing and eliminating loan defaults. The defaults manifest in the mode of the aggregate bunch of clients that become indebted as well as the volume of facility on default. Loan delinquency is always in the heart of the participants in the Credit Union affiliation reason being the descending drifts in profitableness in the event non-performance of loans that manifest in borrowers on top of the affiliated and correlated critical emanation of financial competence. A thorough check into the causes of dodging payments henceforth gets critical in the upward move of mapping and gauging forth a plan of action towards a tenable and viable Credit Society in Kenya.

1.1.2 Saving and Credit Cooperatives within Kenya.

A SACCO is an association of personalities, who have a common objective, registered under Kenya union of savings and credit co-operatives (KUSCCO) as the top umbrella body and operates under the Ministry of Industrialization and Enterprise Development in Kenya, and permitted to mobilize savings from members and in turn lends back to them. Savings and Credit Cooperatives are governed by the SACCOs' by-laws. The sector is measured and regularized by SASRA. Mostly, SACCOs are manned and administered by a team of experts that is accountable to an elected committee by members as per the by-laws of the credit union. Most SACCOs in Kenya are aligned to a specific mode of industry or sector of operation and work. For example, Stima SACCO is for power cohort and dispersal sector employees, while Magereza SACCO is composed of employees of prison services.

On matters of money lending, SACCOs attracts deposits and allow lending in their nature and are an ideal way to consolidate ones savings as their mode of investment. The SACCO mobilizes deposits and in turn lends them out to its members or invests in legal instruments such as shares, treasury bills and bonds, and in some cases property as approved by the by laws. Dividends from SACCO savings for a member are quite high and occasionally better than what banks are able to offer. Savings in a SACCO do not entice bank charges at all. Interest accrued on the savings gives higher returns than the rates from banks. Borrowing from a SACCO, once one becomes a member of the SACCO is usually limited to their savings. The standard amount a member can borrow is up to 3 times their cash deposits, provided other members stand as guarantors or they give a form of security. SACCOs have a number of services and products to offer, for example emergency loans which should ideally be processed within a period of one day, school fees loans, advance loans and normal loans.

While other financial entities the likes of banks may make provisions of larger unsheltered credit facilities to borrowers, borrowing from a SACCO has several pros: First, SACCOs charge lower interest rates and these hardly ever change, and are currently capped at 1% per month. Banks also revise their interest rates from time to time as directed by the Central Bank Rate while SACCOs scarcely revise their rates. Secondly, as a member of the SACCO, you earn dividends on your savings as part of the borrowed amount hence sinking your borrowing costs further and thirdly while servicing a credit union's facility, a member is supposed to maintain and retain the usual monthly savings as done before. Through this a saving chastisement is build, and helps one accrue a worthwhile investments ground.

According to SASRA (2017), membership of SACCOs increased from 3,145,565 to 3,456,975 representing a growth of 9.9% for the period 2015 to 2016. Total assets grew from 342,848 million to 393,136 million representing 14.7% growth. The industry also realized a growth of 12.6% in net loans and advances from 251,080 million to 282,733 million. Total deposits grew by 14.9% from 237,440 million to 272,749 million. Capital reserves increased from 50,856 million to 67,555 million representing a 32.8% growth. One hundred and seventy seven (177) SACCOs were licensed to operate in Kenya for the year 2016. However, two DTS were deregistered in the year 2016 hence 175 SACCOs were in operation for the financial year ending 2016. Additionally thirteen (13) DTS were placed under restricted license for half a year due to non-compliance with prescribed rules and guidelines that safeguard member interests.

According to SASRA (2017), there has been increase in the ratio of loans at risk of default measured as loans not performing presented as a ratio of gross loans from 5.12% registered in 2015 to 5.23% recorded in 2016. This was mainly due to increase in loan defaults from Kshs 12.92 Billion registered in year 2015 to Kshs 15.75 Billion in the subsequent year of 2016. This ratio is higher than the recommended WOCCU ratio of 5% and far much above the SASRA recommended ratio of maximum 3%. Thus SACCOs ought to put in place efficient credit management procedures and policies curb the rising number of over delayed payments which threaten their survival.

1.1.3 Metropolitan National SACCO Limited

Metropolitan National SACCO Society Limited officially began its operations back in 1978 after its registration on 10th February 1977. From then it has fully-fledged in escalations and in the course of undertaking its core business, renamed two times to mirror its topographical environment it offered services. It then got licensed by SASRA to operate in a capacity of a Deposit Taking SACCO (DTS) in 2011.

In the initiation stage, the Sacco was projected to offer service to the teaching staff at the primary level in Kiambu district, by then the central province region. As years went by, the Sacco's unifying accord was exposed to include all willing civil servants, employees from private organizations around Kenyan boundaries.

Metropolitan National SACCO had a total asset base valued atKes.8.550bn as at 31^{st} December 2015, it had also member accumulations totaling toKes.4.777billion while retained earnings were at Kes.1.157million. The incomes for that time was also equivalent to Kes.1.227million.The Sacco has registered a fascinating growth with enrollment presently positioning with 85,000 members and branches in Nairobi being two besides Kiambu, Bungoma, Kisumu, Limuru, Nakuru and Thika. Additionally, it has also micro-branches in Machakos, Emali, Loitokitok, Mombasa, Kajiado, Migoria,Ngong, Namanga, Nanyuki, Eldoret, Matuu, Kitale and Siaya. As the name suggests, it has a nationwide representation and spread and therefore it will stand as a good case study that will represent the SACCO fraternity in the research problem being studied.

The members of Metropolitan National Sacco are drawn from a variety of areas the likes of TSC (Secretariat, tutors, primary and secondary school teachers), Retail chain shops (Nakumatt, Tuskys, Naivas), Security firms (KK security, Wells Fargo, Security Group of Africa), Administration Police, Kenya Police, Kenya Defense Forces, NYS, Rift Valley Railways, the Sacco staff and their relatives in civil employment amongst others. Its vision is ‘To be the leading financial service provider to our members and the community’ in thecountry. In bid to achieve this visions the Sacco mobilizes funds, provides credit and other financial services to the customers as its success so far is based on its efficient and productive policies. The Sacco has clearly outlined values. These values include; Accountability, Honesty, Integrity, Customer Respect, Professionalism, Commitment to Excellence and Team Work.

Despite the evident progress, Metropolitan National Sacco has faced a variety of challenges. Among these, is the issue of loan defaults upon loan provisions. These services are provided under a variety of conditions. However, the rate at which members pay back is very low.

1.2 Research problem

Deposit Taking SACCO societies in Kenya are witnessing elevated credit risks that manifest in more expeditious growth of non-performing loans (Central Bank of Kenya, 2016). The loan volumes becomes a test as the normal overall NPLs ranking at 9.7% for the regularized union schemes differing from the Regulator’s (sasra) sensible directives providing that loan debts shouldn’t cross the cut-off line of 5% (Maina, Kinyariro & Muturi, 2016). Available data indicate a weighty development in the amount defaulted by SACCO members each year with the default amounts increasing gradually from 10.6 million in 2009 to about 15 million in 2015. The number of defaulters also improved from 129,398 in 2009 to 240,100 in 2015 (Mutua, 2016).

Mugwe (2011) notes that, dodging on repayments of loans pose the greatest danger to establishment of the SACCO movement in Kenya. Masinde (2014) indicates that the problem of default has become so serious in the SACCO sector that some members have chosen to withdraw their membership, saying the system can no longer be trusted and they fear losing their money. The high rate of non-performing loans is indicative of problems in the credit risk management of SACCOs. It is a sign that the regulations spelt out in SASRA's report (2008) may not be having the intended effect.

Karikari (2011) points out that low recovery rate of loans has been a great challenge, and lenders are criticized by the beneficiaries on loan terms. Within the SACCO movement in Kenya, there is an escalating rate of loan default despite the improved measures taken like appropriate loan assessments, timely reminders on settlements by loan receivers and intensifying on timely follow-ups on loan defaulters which has been taken by SACCOs to solve the problem. This research paper endeavors to ascertain the effect of insider lending on loan default, determine the effect associated to poor loan recovery rate on loan repayment, ascertain the influence of employer negligence to remit deductions on loan default and establish the effect of lenders' transaction costs on loan repayment in the contemporary times.

For studies conducted on loan defaults, various researchers tried to examine parameters that could probably lead to credit risk. Such parameters include, credit interest rates, social factors, size of the firm and the effect on SACCO performance as well as the prospective borrower's ability to repay (Gegeh, 2016). Even though various researchers have conducted research on loan defaults and other related factors, there is no research that points out on how a combination of insider lending, lenders' transaction costs, loan recovery rate and the escalating employer negligence have adversely led to non-performance of loans in SACCOs in Kenya. Therefore, the survey will endeavor to establish the loan default determinants in SACCOs in Kenya in the contemporary times.

1.3 Research objective

This academic work seeks to ascertain and determine those major elements leading to non-repayment of loans in saving and credit cooperative societies within Kenyan context.

1.4 Value of the study

Through the completion of the academic work, adequate information will be provided relevant in dealing with determinants of loan defaults and widely assist other researchers who opt to carry out future studies on issues related to loan repayment defaults in SACCOs. It will also benefit SACCOs to have a classical strategic plan that can efficiently and effectively foresee the likelihood of credit risk hence help mitigate chances of loan default in SACCOs. This research will largely help Metropolitan National Sacco Ltd to establish good lending policies through assessment of member's financial position before lending in order to eradicate bad debts. An increase in competition in the business sector makes the information relevant to managers. Managers realize the need to put it into practice effective loan policies, hence through this study; managers will efficiently plan for loan disbursement and reduce cases of loan defaults in Metropolitan National Sacco. The research will also prove beneficial to the society at large.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This stage has scrutinized a number of models that support the survey. Empirical review really focused on related study that exhibits the correlation between determined variable (Loan default) and predictor variable (determinants of loan default).

2.2 Theoretical Framework

This academic work was based on the Information Asymmetry Theory, Agency Theory, Credit Default Theory and Theory of Delegated Monitoring of Borrowers.

2.2.1 Information Asymmetry Theory

A research by George A. Akerlof (1970) was the first study to introduce the concept of information asymmetry. His study involved examining information asymmetry in automobile markets. He argued that in most markets customers use market statistics to measure value of goods, this means that buyers use the average market information while sellers have specific commodity information knowledge. Akerlof found out that information asymmetry created a scenario where sellers were able to sell less at an average market quality.

The theory further notes that it is difficult for financial institution to distinctly differentiate bad and good borrowers, Auronen (2003); as a result, this may cause adverse selection of customers and also moral hazard problems. Bofondi & Gobbi (2003) found out that adverse selection and moral hazard are the major reasons why cooperatives have many non-performing loans.

Stiglitz and Weiss (1981) in his study noted that information asymmetry leads to credit rationing disadvantaging credit worth borrowers. It can clearly be seen that information asymmetry adversely affects efficient credit allocation. With the adoption of credit information sharing mechanism in both public and private sector through credit reference bureau (CRB) which allows access and sharing of information either voluntarily or compulsory has played a critical role in eliminating information asymmetry.

2.2.2 Agency theory

It is anchored on permissible relationship between two parties, the principal and a counter party referred to as an agent with an obligation to undertake some services. The principal delegates decision making duties to be performed by the agent, Jensen & Meckling (1976). In addition, agents are given powers to represent the principal and enter into a contract with the third party without referring to him or herself, Wright & Oakes (2002). This theory traces its grounds to mismatch arising from information asymmetry between shareholders, debt holders, and management about earnings distribution which can lead to firms engaging in high risk profile projects or engaging in projects which could result into a loss, Mayers & Smith, (1987).

Anthony A Atkinson (1978) observes that in most agency relationships the agent is better informed than the principal about the possibilities facing the firm. This inherently creates a fundamental problem for control since most of the information relevant for the control of the agent's behavior is possessed by the agent and not the principal. Given this the principal cannot be sure that the agent is making decisions that are consistent with the principal's objectives for the firm. He suggests that by sharing profits which result from the agent's decision making, goal congruency between the goals of the principal and the agent can be achieved.

2.2.3 Theory of Credit Default

According to Kenan (1999), a credit default denotes the economic disappointment of an object, a person or an establishment. A notion of credit default ought to subsequently represent an organized knowledge of the agents straight away leading to the outcomes affiliated to loan deliquescence. This kind of idea is needed to offer direct contributory connections among macroeconomic reasons of converting surrounding financial setting and atmosphere and the minute economic outcomes on diversifying individual or institutional financial circumstances, resulting into feasible credit non-repayments. Maximum existent theories of credit default do not meet this originating necessity.

2.2.4 Theory of Delegated Monitoring of Borrowers

This concept is primarily based on lowering the cost incurred in monitoring statistics available approximately to a borrower that is beneficial in resolving enticement hitches between a lender and a borrower. Monitoring of a borrower in a monetary institution involves gathering of statistics regarding the borrower before and after lending out the credit facility. It includes screening of advance candidates analyzing the borrower's developing dependability and making certain that the borrower clings to the terms of the loan agreement. A financial institution such as a SACCO should be privileged to obtain information in this method where the borrower is typically required to have their current account being operated by means of the financial institution they're borrowing the loan facility from. This will enable the MFI to assess the cash inflows and outflows in an attempt to monitor the borrower, Mathew and Thompson (2008).

2.3 Determinants of Loan Defaults

2.3.1 Lenders' Transaction Costs

The transaction costs that financial entities attach to loan transactions are increasing every now and then hence the need to reduce them. The costs for borrowing a loan are larger for small loans as opposed to larger loans. The costs of mobilizing, lending, and recovering funds are also high for financial institutions. A renewed attention is needed to be put in place so as to measure the transaction costs and deduce methods to reduce them. As a result the increased transaction costs of SACCOs have increased to an extend of going beyond the authorized spread between maximum lending rates and cost of the funds, hence attention has been called upon to have a guaranteed measure of the magnitude such costs have gone to and place ways to minimize them so as to expand lending to top clients and enhance the viability of financial organizations, Ahmed and Ladman (2002).

2.3.2 Loan Recovery Rate

A number of factors help explain the poor loan recovery experience of Saccos after they disburse loans to members and borrowers. The operational SACCO branch networks tend to be understaffed compared to the volume and value of loans issued to borrowers. Branch personnel have been poorly trained in the supervision of SACCO loans. The majority of their training emphasizes more on proper documentation procedures for disbursing loans rather than concentrating on the ideal and appropriate recovery techniques

(Ahmed). Recovery performance is delineated as the proportion of loan payments received against loans disbursed.

2.3.3 Insider Lending/policies

These comprise of very weak institutional capacity and rules which mostly include poor governance, lack of professionalism, under qualified staff and operating systems. According to Laeven (2001), insider lending are the loans and advances issued to persons inside the organization or individuals with close association to the financial institution and have influence and control. It also includes borrowers giving kick-backs to managers to bend controls or offer facilities in which they are not qualified for. According to cooperative act (2008) insider lending comprises of loans issued to employees and directors. The Kenyan financial institutions are substantial in covering immense loans to their stakeholders, loans in which the repayment periods get broken resulting into the increase in loans not performing, Brounbridge (2007). Such loans get defaulted in clearly foreseen ventures including real-estate property that earn no returns on investments (ROI) clearly resulting into mortgage defaults. Excess insider lending can lead to high losses which jeopardize the objectives of a financial institution, Laeven, (2001).

2.3.4 Employer Negligence

It actually becomes quite indifferent and heartless to the extent that an employee will undergo a rigorous journey of sacrificing almost all his contentment to accumulate shares in a union scheme. Then the employer through seemingly via gluttony, financial discomfort orprecipitous animosity opts to hold back the contributions of the employee to the Sacco for several months. In the process the Sacco becomes constraint to a point of not meeting its primary mandate of advancing loans to its members. By close of year 2009, employers withheld contributions amounting to Kes 800 million for employees been deducted through a check off system and had failed remittance to the respective SACCOs in Kenya. That translated to Kes 2.4 billion as an amount for lending held back from Saccos assuming the usual culture of lending in multiple of three times ones savings. Corporations/employers ought to be restraint from the shameful habit of withholding the progress of abundance of Kenyans in their custody inquest of the profit motive as this affects liquidity of SACCOs attracting loan defaults (Business Daily 2010).

2.4 Empirical Review

Non-performing loans have emerged as the latest thorn in the flesh in the subject of managing credit and certainly new edge in the discipline of finance where the accumulation of NPLs is normally as a significance of more than a few of issues, inclusive of domestic economic depressions and prevailing fiscal trends, conditions of commerce decline, extreme necessity on over extreme borrowing among institutions, internal borrowing and ethical threat, Goldstain and Turner (1996).

Servigny & Renault, (2004) noted that loans that are not performing have reserved a renewed magnitude in finance simply the percentage rate and managing a firm's financial position than it were 15 years back. Due to increasing burden of NPLs on financial institution's stability reports and constant bank breakdowns, the Central Bank of Nigeria for Prudential Regulations (1990) and subsequent checkups incorporate credit amenities into overdrafts, advances and loans, profitable papers, bankers' agreements, payments discounted, leases, , and loss incidents related to credit risks of banks.

Elaine, (2007), noted that riskiness of credit summarizes the capacity misfortune in an occurrence of credit decline or when a borrower dodges a legal payment. Therefore, a genuine and proper evaluation of loans could be very essential to a lender. Abolo, (1999) reinforced Dorfman's statement and came up with new ideologies of loaning beneath three titles, summarized as, safety, correctness and productivity of credit, which similarly enforces lending institutions to adhere to the set standards. Although credit is subject to trust and faithfulness, regardless of the magnitude of sureness in which parties have towards one another, it doesn't decrease the consequence of close examination of those loan portfolios in which accurate trust has been contravened intentionally. Thus, the creditors must look for and avoid deceitful debtors.

Goto (2004) carried out research to study the financial management issues and it revealed that lack of professional manpower and personnel structures, favourism, corruption and restrained overview of operating system by means of the supervisory committee brought about financial mismanagement issues at Nyati SACCO. The study additionally revealed that those problems affect the operation of many SACCO'S in the country.

A research by Essendi (2012) on impacts of credit risk on loans portfolio found out that efficient credit functions guides administration and management of SACCO loan portfolio aimed at ensuring funds are equally distributed and liquidity maintained. The findings concluded that credit policies are designed by members with little engagement of employees and directors. New policies are formulated based on existing policies, overhead cost and creditor's trends are put into consideration when formulating credit policies. The study made use of descriptive research design, 106 licensed SACCOs were targeted and a sample consisting of 35 SACCO's selected from Nairobi County. Secondary plus primary data got incorporated in the study. Primary data got gathered via questionnaires while secondary information was gathered from publications and reports done by Sasra. Descriptive statistics combined regression analysis was used to analyze data.

Tundui et al. (2013) examined how household income affects loan repayment and concluded when the income is high the default rate is low. They attributed to the increase ability of earning more by venturing into diverse business opportunities which eventually enable the borrower to repay the loan when fall due. A low-earnings household with above-average wealth is better off than a low earnings household without wealth. The presence of wealth is likewise one purpose why income and consumption aren't necessarily equivalent, for a given earnings, consumption can be up stretched by way of running down assets or by collective debts and consumption can be reduced through saving and adding assets. In addition, the greater independent the borrower (proprietor) is on profits from the company supported via the loan fund the greater the obligation to enterprise operations and subsequently the greater the employer growth and reimbursement rate.

Arminger, (1997) recognized gender besides age has been part of the widely used socio-numerical elements to distinguish the predictive strength of gender. Their findings suggest clear evidence that women dodge loan payments less frequently may be because they tend to be subject to high risk. In reference to Coval et al., (2000) gender is a fair discriminatory based on the demographic non-repayment ratio of males compared to females. His outcome shows as the association between gender and reimbursement is positive though insignificant after regulating for a number of micro-financial institutions-specific effects. Goetz and Geotz and Gupta (1996), proposes that females may have an advanced incentive than males for credit reimbursement for it permits them to maintain access to village groups, whereas males have added favorable circumstances for intimacy.

Duy (2013) concluded that loan size affects the repayment of the loan. Smaller loans are likely to be repaid on time on group based scheme while large loans are repaid on time by individual borrower. This could be because of the individual socio-economic position of the borrower in different schemes. Individual borrowers are relatively better endowed and have higher income levels. They assumed that individual borrower invest in expensive projects which boost their incomes. However, it is argued that larger loans are unlikely to be repaid than smaller loans. Larger loans may encourage unwise spending than small loans where caution is observed by the spender. Most of the farmers are unused to handling of large funds and once given such funds could easily be misapplied. Similarly, Tundui and Tundui (2013) suggest that loans size increases with the default rate. As the loan size increases, more problems of default get reported. This implies that the burden of repayment increases when one borrows large loans.

Muthoni (2016) comparatively assessed the business and borrowers characteristics that cause loan default, and interestingly both factors affect the loan repayment. Pasha and Negese (2014) argues that the loan usage on the intended purpose determine its repayment. When the loan is used for the intended purpose, it is likely to be repaid while misallocation could lead to repayment problems. The purpose of the loan is very vital to the borrower and the supplier of the loan and diversion of the intended fund to risky business opportunities may result to huge losses. The supplier of the funds make assessment of the loan based on stated business and award loan limit depending on the risk associated with that business.

Karikari (2011), the time given to a debtor to repay the entire loan significantly affects the loan repayment. The suitable period arranged with the supplier of funds reduces the loan default. When the period is adjusted to suit the borrower, then it minimizes the default but empirical evidence shows that there is an adverse association amongst repayment and period of repayment (Pasha and Negese, 2014). Wegner and Awore-Vitary (2012) explains when repayment duration is long, there is low rate on defaulting. It prepares the borrower to earn substantial amount that can service the loan. But when the period of repayment is shorter, borrower may not get as much to repay the loan.

2.5 Summary of Empirical Review

Critical assessment of empirical studies involved examining relevant studies from both locally and internationally. Studies carried out on loan default points out that it is a crucial entity of company's long-term strategy and has effect on financial performance of credit institutions. Loan provisions stand to be an uncertain initiative because reimbursement of loans can rarely be guaranteed. Universally, regardless of the necessity of loan in agribusiness reproduction, its acquisition and reimbursement are troubled with several troubles specifically within the small scale farming as per Awoke, (2004). It is stated in experimental research that greater percentage of default has existed as a perpetual dilemma in utmost agribusiness credit systems prepared through states. Defaulting has largely emanated from weak administration methods, acts of diversifying loans and reluctance to pay off loans. Because of this, creditors create various institutional strategies aimed toward decreasing the danger associated with loan delinquency. In the context of imparting loan to the impoverished rural dwellers, of great importance is organizational modification that mixes sensible and feasible and tenable banking standards with powerful scrutiny and monitoring action plans that aren't primarily gauged on actual security which include land.

In Koopahi and Bakhshi (2002),made use of a discriminate evaluation to pinpoint defaulting agriculturalists from non-defaulters of agribusiness bank beneficiaries in Iran. Outcomes confirmed equipment usage, duration of paying back, and financial institution management on the usage of credit did have full-size and effective impact on credit reimbursement performance on agriculture. Then again, occurrence of natural calamities, training at advanced levels of the loan beneficiary plus the period of the loan to be received did have considerable and terrible impact on established elements.

2.6 Conceptual Framework

The study embraced a conceptual framework that indicates relationship between independent variables (lenders' transactional costs, loan recovery rate, insider lending and employer negligence) and the dependent variable as indicated below.

Independent Variables **Dependent Variable**

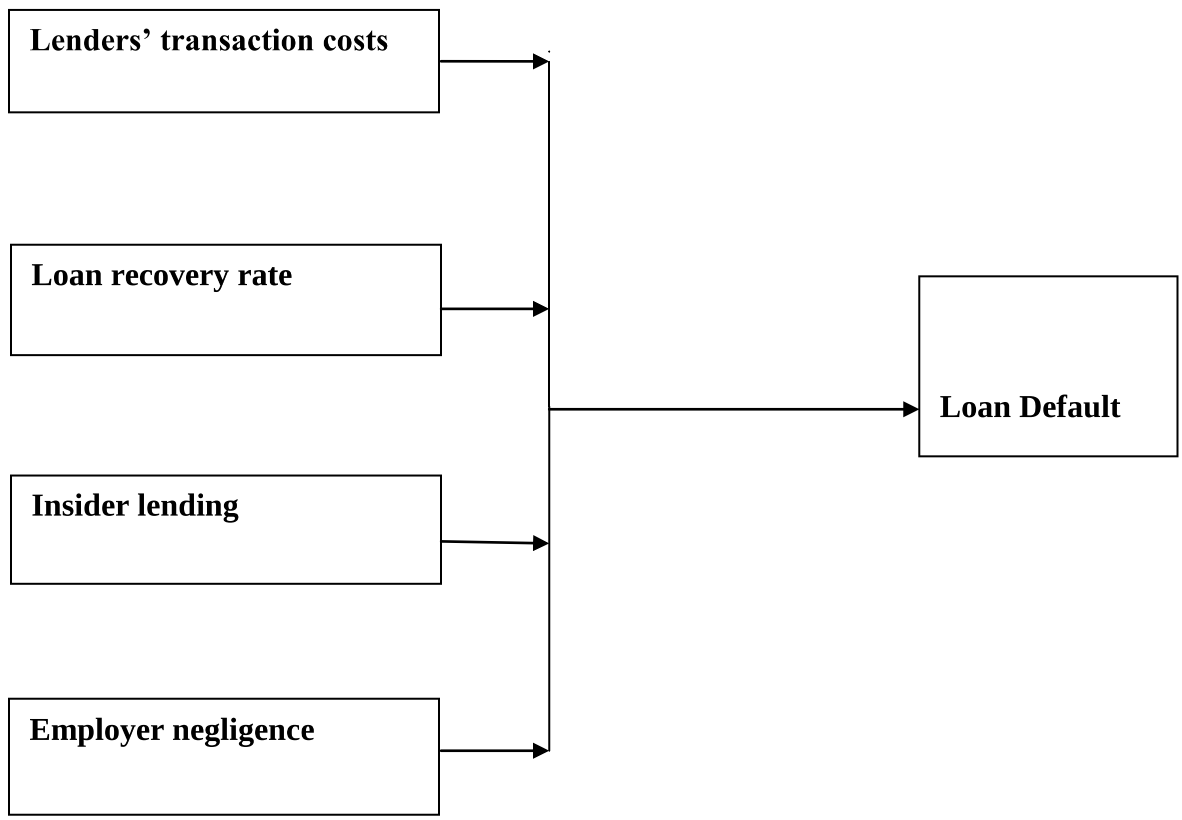

Figure 2.1 Conceptual Framework

Source: Researcher, 2018

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter contains description of the technique and approach used in conducting the survey. The research design and the populace are also discussed. Besides, the sampling design, the tools used in collecting data and methods of analyzing data are also discussed.

3.2 Research design

It involves planning, organization, collection and analysing of facts to offer data and solutions to the present problem of the research. This research looked at a case study design by undertaking a detailed and intensive analysis of Metropolitan National SACCO Ltd. It is a descriptive study layout that expresses data and traits on the population under study and it describes and accepts comparative analysis of the state, an event and a community, a group of individuals or inhabitants over a specific period of time, Chandran (2004).

3.3 Population and sample size

A population is an outlined number of organisms of the same group living geographically in same area capable of being studied with common observable characteristics distinct from other populace, Ngechu (2004).The populace of interest in this study was Metropolitan National Sacco Ltd’s financial statements and annual reports for a period of twenty seven years within the entire branch networks in Kenya. Sampling is a method of choosing a representative set of elements to accurately represent the entire population, Chandra (2004). The definition encompasses selecting few members to represent the entire population. This study did not make use of a sampling procedure that necessitates the use of a questionnaire but purely concentrated on quantitative secondary data hence no sampling technique used.

3.4 Data Collection

Quantitative method of collecting data was utilized to compute the problem by way of adopting statistical data or information that can be processed into usable demographics. Quantitative research method of data collection utilizes information to generate facts and uncover patterns in research. The typical quantitative data gathering strategy obtained relevant data from management information systems and financial statements.

The researcher relied on secondary data, which was sourced from Metropolitan National SACCO journals, website interceptors, online surveys, published financial reports and majorly SASRA annual reports of SACCOS as they contained relevant information relating to Sacco's loan default aspects in Kenya. The period chosen was for 27 years ranging from1990 to 2017. The secondary data sources were also used for purposes of literature review.

3.5 Reliability and Validity of Research Instruments

The rate at which a tool quantifies that which is supposed to compute out is referred to as validity, Cooper and Donald (2008). Validity formed the basis of designing the data entry table to ensure that the study addresses the subject matter of the research. It was tested using Pearson product correlation coefficient (R) done by correlating loan default determinants with significant correlation with loan delinquency which indicated their validity. Reliability refers to the degree at which a measurement can be repeated and consistently deliver similar results, Cooper & Schindler (2008), where the test for reliability was done with the use of cronbach's alpha. If cronbach's alpha value is higher than 0.5 then the study is reliable. The higher the value the higher the reliability.

3.6 Techniques for Data Analysis

The unprocessed data was arranged and systematically classified to facilitate analysis with the help of SPSS version 21 for it allows the use of statistical tools such as regression and correlation. The researcher keenly checked for legibility, completeness and reliability of information collated and provided by Metropolitan SACCO and SASRA. The analysis was based on the numerical data. Multivariate regression analysis was completed to test the correlation amidst loan default and determinants of loan defaults.

The multiple regression models as indicated below show the relationship between the variables. Their coefficient indicates the strong point of their relationship amongst the response and the predictor elements.

$Y= \beta_0+ \beta_1X_1+\beta_2X_2+ \beta_3X_3+\beta_4X_4+ \varepsilon$

Y= Loan delinquency -amount of loan that the Sacco terms as defaulted.

β_0= y-intercept or constant-this is autonomous default

β_1-β_4= Coefficients beta for each variable.

X_1= Lenders' transaction costs

X_2= Employer negligence

X_3= Loan recovery rate

X_4= Insider lending

ε = is the error term or residual.

3.7 Test of Significance

The coefficient of determination statistics (R-squared) was used to show the proportion of loan delinquency (dependent variable) explained by the changes in causes of loan default beingthe predictor or manipulated variables. P values were utilized to determine the significance level at 95% confidence level. P values greater than 5% were considered insignificant ($0.05>P$) while p values less than 5% were considered significant ($P<0.05$).

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CHAPTER FOUR: DATA ANALYSIS, RESULTS & DISCUSSION

4.1 Introduction

The chapter below accommodates descriptive statistics, correlation analysis, model summary, regression result and interpretation of the outcomes.

4.2 Response rate

The research work purpose was to find out the determinants of loan defaults in SACCOs regulated by SASRA in Kenya. The secondary data was collected from SASRA regulated SACCO's reports, and majorly from Metropolitan National SACCO Ltd financial reports from time period 1990 to 2017which made a reaction rate of 80.5%. This reaction rate was considered suitable to draw a final judgment of the research work. Weisberg, Krosnick & Bowen (1996) recommends a response rate of 70% which is deemed representative and fit for data analysis.

4.3 Correlation Matrix

Correlation matrix was applied in ascertaining the strength and the nature of association between the elements used in the study. The regression matrix is presented in the table below. The conclusion highlights the association amidst loan delinquency and transaction costs are positive and strong. The association between loan delinquency and employer negligence is also positive and strong. Loan recovery rate has a weak but positive relationship with loan delinquency while insider lending has a moderate but positive association with loan delinquency.

Table 4.1 Correlation Matrix

Correlations						
		Loan delinquency (000)	Lenders' transactional costs(000)	Employer negligence(000)	Loan recovery rate(000)	Insider lending(000)
Loan delinquency (000)	Pearson Correlation	1				
	Sigf. (2-tailed)					
	N	27				
Lenders' transactional costs(000)	Pearson Correlation	.722**	1			
	Sigf. (2 _tailed)	.000				
	N	27	27			
Employer negligence(000)	Pearson Correlation	.809**	.223	1		
	Sigf. (2 _tailed)	.000	.254			
	N	27	27	27		
Loan recovery rate(000)	Pearson Correlation	.165	.358	.140	1	
	Sigf. (2-tailed)	.401	.062	.476		
	N	27	27	27	27	
Insider lending(000)	Pearson Correlation	.526**	.872**	.037	.514**	1
	Sigf. (2-tailed)	.004	.000	.851	.005	
	N	27	27	27	27	27
**Correlation is significant at 0.01 level (2-Tailed).						

Source: Researcher, 2018

4.4 Reliability Analysis

To test whether data was reliable an analysis using Cronbach's Alpha was incorporated which quantifies internal elasticity and frangibility. Cronbach's alpha was arrived at by use of the application of SPSS version 21 for accurate analysis of reliability. The value of the alpha coefficient ranges from zero to one and is used to explain the reliability of factors extracted at 0.05% significance level from multiple-point formatted scales. The higher the value the more reliable the scale that was generated. Cooper & Schindler (2008) do indicate 0.5as an acceptable coefficient of reliability.

Table 4.2 : Reliability test

Cronbach's Alpha	Cronbach's Alphabased on-standardized items	N of items
.930	.915	5

Source: Researcher, 2018

From table 4.2 above, Cronbach's Alpha is 0.930,a clear indication of an internal regularity and elasticity of a high level for our ratio/scale.

4.5 Regression Result

4.5.1 Model summary

A summary of the model provides determination of coefficient statistics that exhibits the ratio of dependent variable (loan delinquency) regressed by the changes in predictor variables (loan default determinants).R-squared of 0.887 % signifies that 88.7% of the total variation of the influenced variable is attributed to the changes in the explanatory variables.

Table 4.3: Paradigm summary

model	R	R-square	adjusted R-square	Std error of estimate
1	.942[a]	.887	.868	.130635

Predictors: (Constant), Insider lending, Lenders' transaction costs, Employer negligence, Loan recovery rate

Source: Researcher, 2018

4.5.2 Analysis of Variance

There was incorporation of ANOVA model to ascertain if the model used is appropriate. As per table 4.4 below, the F-statistics is statistically significant therefore the model was appropriate and fit for estimation.

Table 4.4 : Analysis of variance

Model 1	Sum of squares	df	Mean square	f	Sigf.
Regression	3.088	4	.772	45.236	.000[b]
Residual	.393	23	.017		
Total	3.481	27			

a. Dependent Variable: Loan delinquency

b. Predictors: (Constant), Insider lending, Lenders' transactional costs,

employer negligence, Loan recovery rate.

Source: Researcher, 2018

Based on table 4.4 above regarding variance analysis, it can be summarized that; Sum of the squares do measure the variability of a certain data set. In the regression model given above, the sum of squares of 3.088 is larger than residual of 0.393, it can be concluded that this model significantly accounts for much of the variations of dependent model meaning that variations in loan defaults in deposit taking savings and credit cooperatives within Kenya are a contribution of lenders' transaction costs, poor loan recovery, insider lending and negligence of the employer to deduct and remit Sacco deductions as employee contributions.

4.5.3 Regression Coefficient

Regression coefficient was presented in table 4.5 below. The result indicates that all the variables (explanatory variables) are significant in explaining non repayment of loans in SACCOs within Kenya except employer's negligence and insider lending.

Table 4.5: Regression Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	**Std. Error**	**Beta**		
1					
(Constants)	11.159	.381		29.305	.000
Lenders' transactional costs	6.95006	.000	.655	5.529	.000
Employer negligence	.004	.004	.087	.983	.336
Loan recovery rate	-5.8600	.000	.314	-2.069	.049
Insider lending	-.040	.039	-.113	-1.022	.317

a. Dependent Variable: Loan delinquency

b. Predictors: (Constant), Insider lending, Lenders' transaction costs, Employer negligence, Loan recovery rate.

Source: Researcher, 2018

The study sought to establish to what extend do the predictor variables determine loan delinquency. It was found out that, lenders' transaction costs and loan recovery rate had a significant effect on loan repayment frequency hence increased loan default rate.

The regression model was summarised as;

$$\mathbf{Y = 11.159 + 6.95006X1 + 0.004X2 - 5.8600X3 - 0.040X4 + \varepsilon}$$

Where Y= Loan default rate quantified by the proportion of total defaulted loan amounts to total loans disbursed to borrowers.

X1= lenders' transactional cost has a positive and a significant impact on non-repayment of loans ($t=5.529$, $P=0.000$, $P<0.05$). Therefore an increase in a unit in lenders' transactional costs results into 6.95 unit increase in non-loan reimbursement.

X2 = Employer negligence produces an assertive impact ($t=0.983$, $P=0.336$) on repayment of loan though the effect is insignificant for it will affect by 0.004 units.

X3 = Loan recovery rate has a negative and significant effect non-repayment of loans ($t=-2.069$, $P=0.049$, $p<0.05$). This implies a unit increase in loan recovery rate will result a decrease in non-repayment of loans by 5.86 units.

X4 =Insider lending portrays a negative impact on non-repayment of loans, however, the effect is insignificant ($t= -1.022$, $P=0.317$).

CHAPTER FIVE: SUMMARY, CONCLUSION & RECOMMENDATIONS

5.1 Introduction

The summary for the entire academic work that forms a basis for the results, conclusion and recommendation based on the results provided in chapter four are provided herein.

5.2 Summary of Findings

The survey relied on secondary data obtained from SASRA regulated SACCOs making a response rate of 80.5%.Cronbach's alpha of 0.930 was obtained and indicated a huge level of internal elasticity for the data. R-squared of 0.887 % was achieved indicating that 88.7% of the total change of the influenced variable was attributed to the alterations in the explanatory variables. The finding indicated that lenders’ transactional cost had a positive and a significant impact on non-repayment of loan ($t=5.529$, $P=0.000$, $P<0.05$). Therefore an increase in one unit for lenders’ transactional costs will result into 6.95 unit increase in non-loan reimbursement. Loan recovery rate was negative and had a significant impact on non-repayment of loan ($t=-2.069$, $p=0.049$, $p<0.0$). This implied a unit increase loan recovery rate will result to a decrease in non-repayment of loan by 5.86 units. Employer negligence had a positive effect on repayment of loan though he effect was insignificant. Insider lending had a negative effect on non-repayment of loan however the effect was insignificant.

5.3 Policy Recommendation

The major aim of the academic work was to establish the major elements championing non-repayment of loans in SACCOs in Kenya. The end conclusions indicated that lenders' transactional cost produced a positive and a significant impact on non-reimbursement of loans and loan recovery rate had a negative and significant effect on non-repayment of loan. Therefore, relying on these findings the study recommends as follows, that in order for SACCOS to mitigate the mess of loan delinquency, they should not only reduce transaction costs in which they moderate the transaction fees but also should up their game of loan recovery techniques. The loan recovery can be adjusted by way of increasing staff rate in comparison to the volumes of loan provisions, also by employing loan recovery professionals and equipping them with adequate training techniques towards the subject matter of Sacco loan supervision to enhance loan performance. There is also the need to undertake a monitoring and evaluation exercise occasionally so as to ensure that they channel the loans they received for the set and intended purpose. This is possible by requiring a provision of financial statements from the borrowers regularly and also undertaking actual visitations to the premises of the debtors to make follow ups and evaluate the developments of their loan projects.

5.4 Advocacy for further Research

The research proposes and advocates for more variables to be incorporated or else different variables to be employed in exploring the factors influencing loan delinquency in SACCOs that are regarded to be of lower interest rates compared to other financial institutions the likes of banks. This is because the findings of this research study were not conclusive but still leaves room for further exploration and investigation in a number of areas. Besides, this study was to act as a preliminary and introductory base for further investigation in the subject matter.

To be precise this study majorly looked at the determinants of loans defaults from the side of the lender and therefore future studies can be carried out to investigate the causes of credit risk in deposit taking savings and credit cooperative societies on the side of the borrower in Kenya. This could be a grey area that calls for a research.

5.5 Limitations of the study

During the survey the problems experienced were, lack of enough time and in adequate information since the data sources could not exhaustively disclose some information. The representativeness of the data is not fully guaranteed since some information was sourced from older documents while others could hardly be traced as they deteriorated with age and became unusable with time. Other documents were regarded too official and deliberately withheld from the researcher and the general public gaze hence becoming unavailable. Besides, some documents lacked authenticity simply because the person who compiled the information was difficult to verify and in some instances some of the document parts were completely missing.

REFERENCES

Ahmad, S.A. (1997*)* Natural Hazards and Hazard Management in the Greater Caribbean and Latin America. *The University Printers Publication, University of West Indies, Kingston, Jamaica, No. 3*.

Aremu, S. O. (2013). *Analysis of Loan Defaults in Commercial Banks: A case study of AfriBank.* Federation of University of Technology Akure, Retrieved October 17, 2013.

Arene.A. (1992). Loan repayment and technical assistance among small holder maize farmers in Nigeria, African review of money, Finance and Banking.

Arminger, G., Enache, D. and Bonne, T. (1997).“Analyzing Credit Risk Data: A Comparison of Logistic Discrimination, Classification Tree Analysis, and Feed forward Network*”. Computational Statistics*, 12(2). 293-310.

Bichanga, W. and Aseyo, L. (2013). Causes of loan defaults in micro-financial institutions in Kenya. *Inter-disciplinary Journal of contemporary research in Business,* Vol.4 (10), Retrieved August 31, 2013 from http://www.journal.archives31.webs.com/316-335.pdf

Brownbrigde, M. (2007).The Causes of Financial Distress in Local Banks in Africa and Implication for Prudential Policy, UNCTAD/OSG/DP/132.

Boston Consulting Group (2001).*From Risk Taker to Risk Manager: Ten Principles for Establishing a Comprehensive Risk Management System for Banks*, May 20-21, 2001.Tun Abdul Razak University, Malaysia.

Bowie, et al. (1992).*Ethics and Agency Theory: An Introduction.* Oxford University Press, New York.

Balogun, E.D. and Alimi, A. (1988) Loan Delinquency among Small Farmers in Developing Countries: *A Case Study of the Small-Farmer Credit Programme in Lagos State of Nigeria. CBN Economic and Financial Review*, 26, 67-72

Chacha, C. (2006) Repayment performance of Bank loan Beneficiaries under credit guarantee scheme in Tanzania. The case of CRDB Bank P/C. *M Dissertation University of Dares salaam*

Chandran, E. (2004).Research methods*: A quantitative approach with illustrations from Christian Ministries.* Daystar University, Nairobi.

deServigny, A. and Renault, O. (2004), "Measuring and Managing Credit Risk" McGrawHill. New York.

Duy, V.Q. (2013). Is The Repayment Performance of Farmers Better Than That of Non-Farmers? A Case Study of Borrowers of Formal Bank Credit in the Mekong Delta, Vietnam. CAS Discussion Paper No 88. Retrieved on October 2014 from www.researchgate.net/.../239891252..

Essendi, L. K. (2013). *The effect of credit risk management on loans portfolio among SACCOs in Kenya*.(Unpublished MBA Research Project).University of Nairobi.

Firzli, M. Nicolas J. (2010). Greece and the Roots the EU Debt Crisis. The Vienna Review. *ISBN 0-7910-2939-5*.

Fayman, A., & He, L. T (2010) Prepayment risk and bank performance. *Journal of Risk and Finance.*

Fatemi, A. & Fooladi, I. (2006). "Credit Risk Management: A Survey of Practices. *Managerial Finance*. Vol.32, No. 3, pp.227 – 233

Goldstein, M. and Turner, P. (1996), "Banking Crises in Emerging Economics: Origins and Policy Options", BIS Economic Paper, No. 46. (Basel: Bank for International Settlements).

Gallagher, G. T. (1989). *Credit risk analysis*.(2nd ed.). The MacMillan publishing. Inc

Gegeh E. K. (2016). *The effect of credit risk management on performance of deposit-taking among SACCOs in Kenya*.(Unpublished MBA Research Project).University of Nairobi.

Karikari, H. (2012). Poverty Reduction Efforts in Ghana: A Study of the Social Investment Fund Microfinance Programme in the Mifantserman Municipality.

Karim, M. Z. A., Chan, S. G. & Hassan, S. (2010). "Bank Efficiency and Non-Performing Loans: Evidence from Malaysia and Singapore", Prague Economic Papers 2.

Karlan, D, & Valdivia, M. (2014) Teaching entrepreneurship: Impact of business training on microfinance clients and institutions.*Review of Economics and statistics, 93(2), 510-527.*

Keenan, S. (1999) Historical Default Rates of Corporate Bonds Issues 1920-1998. Moods investor service, Global Credit Research, January 1999

Kimathi, P. M. (2014). *The Effect Of Financing Strategies On The Liquidity Of Savings And Credit Co-Operatives Societies Licensed By SACCO Societies Regulatory Authority Operating In Nairobi County*.(Unpublished MBA Research Project).University of Nairobi.

Louise Armitstead, "EU accused of 'head in sand' attitude to Greek debt crisis" *The Telegraph*, 23 June 2011

Lando, David (2004). Credit Risk Modeling: *Theory and Applications*. Princeton University Press. *ISBN 0-691-08929-9*

Mugwe, D. (2011). Loan defaults pose risk to SACCOs‟ financial stability. Retrieved from Business Daily Africa: http://www.businessdailyafrica.com/Loan-defaults-pose-risk-to-SACCOs-financial-stability-/539552-1291524-14nbi54/index.html

Mutua, R. K. (2016). Impact of credit risk management on financial performance of savings and credit co-operative societies in Kitui County. University of Nairobi.

Nawai N. & Sharrif M.N.M (2013) Determinants of Repayment Performance in Microcredit Programs: *A Review of Literature. International Journal of Business and Social Science.*1 (2),152-161

Nouriel Roubini, "Greece’s best option is an orderly default" *Financial Times*, June 28, 2010

Oxbridge Writers (2013).*Savings and Credit Organizations in Kenya*, Retrieved October 17, 2013

Pasha, S.M. A., Negese T. (2014).Performance of Loan Repayment Determinants in Ethiopian Micro Finance - An Analysis. *Eurasian Journal of Business and Economics*, 7 (13):29-49 .

Tundui, C. and Tundui, H. (2013). Microcredit, Micro Enterprising and Repayment Myth: The Case of Micro and Small Women Business Entrepreneurs in Tanzania. *American Journal of Business and Management*, 2(1): 20-30.

Richard, E. (2011). “Factors That Cause Non-Performing Loans in Commercial Banks in Tanzania and Strategies To Solve Them*”, Journal of Management Policy and Practice. Vol. 12, No. 7, pp. 50 – 57.*

Samoei, Hillary Kiprotich et al.; Saudi J. Bus. Manag. Stud.; Vol-2, Iss-5A (May, 2017): 507- 512 Website: http://scholarsmepub.com/website

Uyemura, D.G., & Deventer, D.R. (1993), Risk Management in Banking: *Theory and Ap plications of Assets and Liability Management*, Banking Publication, Kamakura.

Website: Https://www.metrosacco.co.ke

Website :https://www.standardmedia.co.ke/article/2000058683/employers-warned-against-delaying-sacco-dues

World Council of Credit Unions (WOCCU) (2008) Statistical report. *World Council of Credit Unions*, Washington D.C.

APPEDICES

APPENDIX 1: LETTER OF AUTHORITY

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS

Telephone: 020-2059162
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

DATE.....19/11/2018

TO WHOM IT MAY CONCERN

The bearer of this letter ......THEOPHILUS.....NYAMASYO.....KIMAIY

Registration No........D61/53401/2017

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
19 NOV 2018
Box 30197 - 00100, NAIROBI

PROF. JAMES M. NJIHIA
DEAN, SCHOOL OF BUSINESS

APPENDIX II: METROPOLITAN N. SACCO LTD FINANCIALS

Year	Loan delinquency (0000)	Lenders' transactional costs(0000)	Employer negligence(0000)	Loan recovery rate(0000)	Insider lending(0000)
1990	1296.758462	159.2675373	118.7143768	1849.58125	1257.473684
1991	1285.974242	158.7041176	118.7090428	1822.525	1207
1992	1247.859091	155.2533088	183.9797143	1710.3375	1146.26087
1993	1420.160606	172.9304412	202.0782857	1994.9125	1274.666667
1994	1427.74697	175.6337956	206.1788732	2078.3625	1306.541667
1995	1428.192424	184.0937226	222.4615493	2361.2375	1327.458333
1996	1486.284848	187.7507299	224.1178873	2358.88125	1319.16
1997	1529.467164	200.3634286	243.8828767	2419.81875	1352.346154
1998	1611.79403	210.7583571	256.2623288	2570.84375	1366.846154
1999	1622.040299	215.5594286	264.5294521	2673.03125	1378.384615
2000	1018.684211	143.0351724	94.72259259	1936.083333	1355.769231
2001	1020.578947	143.6094828	93.9342325	1859.184211	1325.121951
2002	923.2842105	140.6938983	85.38392857	1838.342105	1210.613636
2003	877.9263158	155.0801695	84.13821429	2091.921053	1272.644444
2004	874.8736842	158.6666102	83.17392857	2100.325	1287.488889
2005	874.0315789	159.0008475	82.78285714	2119.375	1297.266667
2006	898.8210526	161.3959322	84.23285714	2220.825	1312.765957
2007	896.805	171.5621311	84.29206897	2598.45	1334.25
2008	939.24	18.2444918	88.52103448	2701.575	1351.0625
2009	960.74	188.2170492	90.1762069	2840.075	1358.5625
2010	1372.806818	233.7433333	136.8822581	1978.688095	1373.616667
2011	1350.619565	233.2903226	136.9919355	1986.044186	1374.75
2012	1338.423913	235.0806452	131.9734375	1984.288372	1317.883333
2013	1491.351064	257.7548387	146.1928125	2153.516279	1468.723333
2014	1517.90625	264.8225806	146.579375	2179.306977	1472.846667
2015	1517.072917	276.5064516	146.694375	2343.183721	1473.006667
2016	1566.177083	277677419	152.0157576	2355.2	1525.173333
2017	1721.040816	318.84389125	156.4945455	2510.364444	1572.773333