EFFECT OF CREDIT RISK MANAGEMENT STRATEGIES ON CREDIT RECOVERY IN SAVINGS AND CREDIT COOPERATIVES: A CASE OF STIMA SAVINGS AND CREDIT COOPERATIVE SOCIETY KISUMU

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DECLARATION AND APPROVAL

Declaration

This research project proposal is my original work and has not been presented for a degree in any other university or for any award.

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Approval

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ABSTRACT

Credit risk management is the practice of mitigating losses by understanding the adequacy of a bank's capital and loan loss reserves at any given time. To comply with the more stringent regulatory requirements and absorb the higher capital costs for credit risk, Saccos are overhauling their approaches to credit risk. Saccos are struggling to increase their credit recovery and reduce bad debt. Prior studies have been carried out on this area but there have been mixed results on risk avoidance strategy, risk transfer strategy, risk reduction strategy and risk retention strategy. The current study intends to determine the effect of credit risk management strategies on credit recovery in Saccos, a case of Stima Sacco Kisumu. The specific objectives of the study will be to determine the effect of risk avoidance strategy on credit recovery in Stima SACCO Kisumu, to establish the effect of risk transfer strategy on credit recovery in Stima SACCO Kisumu, to assess the effect of risk reduction strategy on credit recovery in Stima SACCO Kisumu, and to investigate the effect of risk retention strategy on credit recovery in Stima SACCO Kisumu. The study will be guided on the Portfolio Theory, Value at Risk Theory and Asymmetric Information Theory. Survey research design will be used .The target population will consist of 60 respondents. Census of the 60 respondents will be used since the population is small and hence manageable. Primary data will be collected using questionnaires. Secondary data will be collected from the Stima SACCO annual reports, (2014 - 2017).Data will be analyzed using quantitative analysis techniques which involve descriptive statistics to analyze the quantitative data. Reliability of questionnaires will be tested on pilot test targeting 10 respondents which will not be part of the population respondents .Content validity test will be done using expert reviewers. Reliability of questionnaires will be tested on pilot data targeting 10 respondents. The Cronbach's Alpha Coefficients will be used and the questionnaire items with Alpha value of over 0.7 will be deemed reliable. Data collected will be compiled, sorted, edited, classified and coded in readiness for analysis. It will be analyzed using the SPSS software. The relationship between independent variables and credit recovery will be established through correlation analysis. The regression analysis and ANOVA will be used to test the effect of risk management strategies on credit recovery at Stima Sacco, Kisumu. The findings of this study will help the managers in formulating relevant loans collections procedures and policies which reduce the size of the bad debt .The policy makers in the Savings and Credit Co-operative Societies sector like SASSRA will use the findings of this study in formulation of policies regarding the types of loans, amounts of loans, requirements of borrowers and the processes of conducting loans collections in the Savings and Credit Co-operative Societies in Kenya.

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LIST OF ABBREVIATIONS AND ACRONYMS

CBK: -Central Bank of Kenya

CR-AE: -Credit Risk Allocative efficiency

CR-CE: -Credit Risk Cost Efficiency

CRT: -Credit Risk transfer

CR-TE: -Credit Risk Technical Efficiency

DEA: -Data Envelopment Analysis

ISDA: -International Swaps and Derivatives Association

KBA: -Kenya Bankers Association

NPL: -Non- Performing Loans

ROA: -Return On Assets

ROE: -Return On Equity

SMEs: -Small and Medium Enterprises

SPV: -Special Purpose Vehicle

OPERATIONAL DEFINITION OF TERMS

Credit risk   Risk of loss of principal or loss of a financial reward stemming from a borrower's failure to repay a loan or otherwise meet a contractual obligation.

Credit risk management This is the practice of mitigating losses by   understanding the adequacy of a bank's capital and loan loss reserves at any given time – a process that has long been a challenge for financial institutions.

Risk avoidance   Not performing any activity that may carry risk.

Risk reduction   Deals with mitigating potential losses of credit. This risk is reduced by diversifying portfolio

Risk retention   A strategy used to mitigate risk when either the cost of sharing a credit risk or transferring it is too high. An example of this would be that the premiums paid to the insurer are higher than the cost of taking the risk itself in the view of the company.

Risk transfer   Is the elimination of the credit risk in exchange for consideration given to the company that accepts the risk.

Credit recovery   Collection of amount due. The normally recovery depends on the purpose, time and condition, business running process .Normally loan amount will be recovered on installment basis. The manager can fix installment period on the basis of nature of their business.

1.0 INTRODUCTION

This chapter provides the background of the study, the problem statement, the research objectives and hypothesis and research questions. It also provides the scope and justification of the study and conceptual framework.

1.1 Background of the Study

Economic Times (2015) risk is the chance that an investment's actual return will be different than expected. A fundamental idea in finance is the relationship between risk and return on investment which that implies future uncertainty about deviation from expected earnings or expected outcome and measures the uncertainty that an investor is willing to take to realize a gain from an investment. There are different types of risks: liquidity risk, sovereign risk, insurance risk, business risk, default risk and so on (Dugguh and Diggi, 2015).

Scheufler (2002), credit risk management is significant to MFIs since it plays an integral role in crediting process by maximizing the institution risk, adjusted risk rate of return by monitoring credit risk exposure with a view of shielding it from adverse effects of credit risk. Scheufler (2002) further explains that credit risk management endeavors to lower risk exposure in extended loans thus having optimal debtors level with reduced chances of bad debts and enhances financial health. As asserted by Dziobek (1998) and Apps (1996), credit risk management refers to the integration of recognized risk, risk assessment, and development of strategic management approaches that endeavor to mitigate the risk by use of managerial resources. McDonough (1998), definition integrates these two concepts to define credit risk management as identification, measurement, monitoring, and control of risk arising from the possibility of default in loan repayments. Every financial institution bears a degree of risk when the institution lends to business and consumers and hence experiences some loan losses when certain borrowers fail to repay their loans as agreed.

Churchill and Coaster (2001), Risk management is part of business planning for large businesses and financial institutions. Though it is a new discipline among Savings and Credit Co-operative Societies, this new focus is as a result of recent crisis and experiences that represents a new understanding of the importance in anticipating unexpected events,

rather than merely reacting to them. Just like any other financial institutions, MFIs face great credit risk as most of the microloans are usually unsecured. The magnitude and level of loss caused by the credit risk as compared to other kind of risks is severe to cause high level of loan losses and even institution failure.

Achou and Tenguh (2008) conduct a study in Nigeria on the relationship between credit risk management and bank performance and found out that there is a significant relationship between financial institutions profitability and credit risk management in terms of loan performance

Musyoki and Kadubo (2012) conducted a study to assess various parameters pertinent to credit risk management as it affects banks financial performance in Kenya between the periods of 2000 - 2006. The parameters covered in the study were; default rate, bad debts costs and cost per loan asset. Financial reports of banks was used to analyze profitability ratio for seven years (2000-2006) comparing the profitability ratio to default rate, cost of debt collection and cost per loan asset which was presented in descriptive, regression and correlation was used to analyze the data. The study revealed that all these parameters have an inverse impact on banks financial performance, however the default rate is the most predictor of bank financial performance vis-à-vis the other indicators of credit risk management. The recommendation is to advice banks to design and formulate strategies that will minimize the exposure of the banks to credit risk.

Mwangi (2012) conducted a study on the effects of credit risk management on financial performance of commercial banks in Kenya using a modern ROE as profitability indicator while non-performing loan ratio and capital adequacy ratio as credit risk management indicators. This study showed that there is a significant relationship between financial performance and credit risk management. The results of the analysis states that both non-performing loans ratio and capital adequacy ratio have negative and relatively significant effect on return on equity (ROE), with non-performing loan ratio having higher significant effect on ROE in comparison to capital adequacy ratio. This means that non-performing loan ratio and capital adequacy ratio reliably predict ROE.

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Moti, Masinde, Mugenda, and Sindani (2012) conducted a study on empirical evidence of effectiveness of Credit Management System on Loan Performance on Microfinance Institutions in Meru Town and found out that credit terms formulated by the microfinance institutions do affect loan performance. The involvement of credit officers and customers in formulating credit terms affects loan performance. Interest rates charged had a negative effect on the performance of the loans, the higher the interest rates the lower the loan performance. Credit risk controls adopted by microfinance institutions have an effect on loan performance, credit insurance, signing of covenants with customers, diversification of loans, credit rating of customers, reports on financial conditions, refrain from further borrowing had an effect on loan performance (Kariuki, 2010). Collection policies adopted by microfinance institution had an effect on loan performance, stringent policy had a great impact on loan performance, and the lenient policy had an effect but was not as great as that of stringent policy.

From the literature review it can be revealed that credit risk management strategies is an important aspect in credit recovery .Results show unsystematic results which however demonstrate a possibility of credit risk management and its association with credit recovery. This study will be carried out to determine the effect of credit risk management strategies on credit recovery in Stima Sacco Kisumu.

Apps (1996), noted that credit recovery is company's ability to generate new resources, from day-to-day operations, over a given period. Avkiran, (1995) further explains that financial performance is the subjective measure of how well a firm can use assets from its primary mode of business and generate revenue. Therefore, the general measure of the overall net income and cash from operations from firm's investment portfolio, in a given period of time, depicts the financial health of the company. A portfolio is a collection of investments held by an institution or a private individual. Sacco's earn financial revenue from their loan portfolio and other financial services in the form of interest fees, penalties, and commissions.

Gatuhu (2013) noted that credit recovery is the way Sacco's are seeking financial sustainability. Many Sacco's were restructured in order to achieve financial sustainability and finance their growth. Tucker and Miles (2004) studied three data series for the period between March 1999 and March 2001 and found that self-sufficient Sacco's are profitable

and perform better, on return on equity (ROE) and return on assets (ROA), than developing-world commercial banks and Sacco's that have not attained self-sufficiency. As such, to be sustainably self-efficient, Sacco's need to generate sufficient profit to cover expenses while eliminating all subsidies, even those less-obvious subsidies, such as loans made in hard currency with repayment in local currency", Tucker and Miles (2004). In order to optimize their performance, Gatuhu (2013) posits that Savings and Credit Co-operative Societies need to become more commercially oriented and stress more on improving their profitability therefore sustainably self-efficient.

Hermes and Lensink (2007), the financial systems approach emphasizes the importance of financially sustainable Savings and Credit Co-operative Societies that guarantee a large-scale outreach to the poor on a long-term basis. Achou and Tenguh (2008) also conducted a research on Saccos and credit risk management and found that there is a significant relationship between credit risk management (in terms of loan performance) and credit recovery (in terms of profitability).

Dugguh and Diggi (2015) defined Risk avoidance as a risk treatment that avoids, sidesteps or discontinues the actions that trigger a particular risk. They further explain that the practice of risk avoidance involves actions to reduce the chances of losses by eliminating risks that are superfluous to the institution's business purpose. Common risk avoidance actions are underwriting standards, hedges or asset-liability matches, diversification, reinsurance or syndication, and due diligence investigation. In each case, the goal is to rid the firm of risks that are not essential to the financial service provided, or to absorb only the optimal quantity of a particular kind of risk. Shao and Yeager (2007) on the effects of Credit Derivatives on U.S. Sacco Risk and Return, Capital and Lending Structure, Risk avoidance can be thought of as preventative actions if were effectively implemented should lead the risk occurrence probability to zero. Migiri (2002) in a study on Credit Risk Management System of Saccos in Tanzania stated that avoiding a risk means to stop or change the track of what is being followed currently to prevent risk completely and that risk avoidance is what to do to avoid the risk in a financial institution. Psillaki, Tsolas and Margaritis (2010) on evaluation of Credit Risk Based on firm performance indicated that Risk Avoidance is adopted by financial institutions as a strategy for responding to a negative risk event, or threat and that it is a response that

eliminates an identified threat hence reducing the probability of it occurring is brought to zero.

From the literature review, it can be revealed that risk avoidance strategy is an important aspect in credit recovery. Result shows unsystematic results which however demonstrate a possibility of the effect of risk avoidance strategy on credit recovery. This study will be carried out to determine the effect of risk avoidance strategy on credit recovery in Stima sacco Kisumu.

Al-Khouri (2011) defined credit risk transfer as a risk management strategy where institutions without comparative advantage in managing attendant risk mandates that institution which has capacity to manage such risks to do so. Individual market participants can buy or sell financial claims to diversify or concentrate the risk in their portfolios. There are also some risks that can be eliminated, or at least substantially reduced through the technique of risk transfer. To the extent that the financial risks of the assets created or held by the financial firm are understood by the market, they can be sold in the open market at their fair market value. If the institution has no comparative advantage in managing the attendant risk, there is no reason for the firm to absorb and/or manage such risks, rather than transfer them.

Study by the Basel Committee on Sacco Supervision (2001) on Risk Management Practices and Regulatory Capital, the techniques for transferring credit risk include financial guarantees and credit insurance which has been a long-standing feature of financial markets. In the past few years, however, the range of credit risk transfer (CRT) instruments and the circumstances in which they are used have widened considerably. Chen and Pan (2012) in their empirical study of credit risk efficiency of Sacco Industry in Taiwan observed that a number of factors have contributed to this growth, including: greater focus by banks and other financial institutions on risk management; a more rigorous approach to risk/return judgments by lenders and investors and an increasing tendency on the part of banks to look at their credit risk exposures on a portfolio-wide basis; efforts by market intermediaries to generate fee income; a generally low interest rate environment, which has encouraged firms to search for yield pickup through broadening the range of instruments they are prepared to hold; and arbitrage opportunities

arising from different regulatory capital requirements applied to different kinds of financial firm.

Peterson and Bohman (2008), conducted a study on risk transfer strategy of SACCOs in Tanzania examined that the financial intuitions have well-documented credit risk management policy that elaborates the products offered and all activities play an important role to manage the credit risk. The institutions have well organized credit manual that documents and elaborates the strategies for managing credit risk and also the part of effective risk transfer strategy and they have to formulate in compliance with the institutions credit policy. Strategies for granting credits also should focus on whom, how and what should be done at the branch and corporate division levels while assessing borrowers. Quantitative credit scoring models should be part of credit risk management mechanisms. Method used was quantitative research method.

Carey (2001) conducted a survey of risk transfer strategy and found that on average the lowest percentage is on the measuring, mitigating and monitoring risk that is 69% score as compared to risk management policies and procedures that is 82.4%, and internal control of banks that is 76%.

Fatemi and Glaum (2000) found that there is significant difference between risk transfer strategy and credit recovery in risk monitoring and controlling. The United Africa Emirate Micro credit Unions have an efficient risk monitoring and controlling system and it has positive influence on risk management practices. The studies above indicates that risk transfer strategy have an effect on credit recovery. Though varying result are shown ,this indicate theory stagnation .The available studies use sample from different organization and some use research designs such as survey which do not reveal correlation. This depicts that the specific studies seeking to establish the effects of risk transfer strategy and credit recovery are not known. Evidently this research therefore seeks to establish the effect of risk transfer strategy on credit recovery at Stima Sacco Kisumu.

Risk reduction strategy is one of the major risk management techniques which involve taking precautionary measures to reduce the likelihood of a loss or to reduce the severity of a possible loss. Kimeu (2008) conducted a survey of risk reduction strategy of unsecured bank loans. The fundamental question is how significant are the risk reduction

strategy on the financial profitability of SACCOS and by extension their survival in the future. Gisemba (2010) researched on the relationship between risk management practices and financial profitability of SACCO's found out that the SACCO's adopted various approaches in screening and analyzing risk before awarding credit to client to minimize loan loss. This includes establishing capacity, conditions, use of collateral, borrower screening and use of risk analysis in attempt to reduce and manage credit risks. He concluded that for SACCOs to manage credit risks effectively they must minimize loan defaulters, cash loss and ensure the organization performs better increasing the return on assets.

Nagarajan (2001), in his study of risk reduction strategy for credit unions in Mozambique found that risk reduction strategy is a dynamic process that could ideally be developed during normal times and tested at the wake of risk. It requires careful planning and commitment on part of all stakeholders. It is encouraging to note that it's possible to minimize risks related losses through diligent management of portfolio and cash-flow, by building robust institutional infrastructure with skilled human resources and inculcating client discipline, through effective coordination of stakeholders improving management efficiency of the credit unions. From the literature above, it can be concluded that Stima Sacco can reduce credit risk by adopting certain lending principles where the decision of granting credit is based on adoption of certain rules or principles of lending carefully build by skilled loan officers. The loan officers in MFI are trained to collect and make judgments about information on entrepreneur's personality, analyze the risk of potential borrowers and decide to approve or to reject the applicant. This would typically involve a face-to-face meeting with each applicant where the loan officer -intentionally or unintentionally -forms judgments about its creditworthiness after interviewing him.

Loan officers should consider information about business' project and business conditions such as forecasts about market, economic growth, and additional macro-economic factors. Those indications are essential in order to get a feeling about the management's ability to handle changes in the environment. Therefore this study seeks to assess the effect of risk reduction strategy on credit recovery in Stima Savings and Credit Co-operative Society Kisumu. Gestel and Baesens (2009) defined risk retention strategy as a strategy primarily concerned with reducing earnings volatility and avoiding large losses. In a proper risk

management process, one needs to identify the risk, measure and quantify the risk and develop strategies to manage the risk. The highest concern in risk management is the most risky products. The prior concern for the risk retention strategy is those products that can cause the highest losses: high exposures with high default risk.

Greuning and Bratanovic (2003) the basis of a sound risk retention strategy include guidelines that clearly outline the scope and allocation of bank credit facilities and the manner in which the credit portfolio is managed, that is how loans are originated, appraised, supervised and collected. Derban, Binner and Mullineux (2005) recommended that borrowers should be screened especially by banking institutions in form of credit assessment. Collection of reliable information from prospective borrowers becomes critical in accomplishing effective screening as indicated by symmetric information theory. Qualitative and quantitative techniques can be used in assessing the borrowers although one major challenge of using qualitative models is their subjective nature. Ndwiga (2011) investigated the relationship between risk retention strategy and financial performance of microfinance institutions in Kenya. The objective of the study was to examine the effects of risk retention strategy on financial performance of Microfinance Institutions in Kenya.

Simiyu (2008) studied techniques of risk retention strategy in microfinance institutions in Kenya. To the researcher knowledge there is no known study done on impact of risk retention strategy on performance of microfinance institutions in Kenya, much of the work done relating to risk retention strategy on financial performance of microfinance institutions has been conducted in the developed world. Further, Pykhtin, (2005) explained that risk retention strategy is an important function of financial institutions in creating value for shareholders and customers. The corporate finance literature has linked the importance of risk management with the shareholder value maximization hypothesis. This suggests that Microfinance will engage in risk management policies if it enhances shareholder value (Ali and Luft, 2002). Thus, effective risk retention strategy either in non-banking firms or in banking entities is expected to enhance the value of the firm and shareholder wealth. From the studies above, it can be revealed that risk retention strategy has significant effect on credit recovery. The credit risk retention strategy as established from past studies focuses on enhancing the shareholders wealth and that is the objective

of Stima Sacco. This study will seek to investigate the effect of risk retention strategy on credit recovery in stima savings and credit co-operative society.

1.2 Statement of the Problem

The long-run objective of Savings and credit cooperatives societies is to be financially sustainable by operating in profitable ways but a significant number of such institutions especially in developing countries make losses which are associated with credit risks which range from reputational risk, financial risks, credit risk, liquidity risk, operational risks, weak internal controls and inadequate Information Communication Technology risks which are at the acute stage in developing countries. The Sacco management therefore need to identify various causes of these risks in order to enhance their mitigating strategies.

Loans constitute a large proportion of credit risks and accounts for between 10-15 times the equity of the Saccos in the lending business and therefore there is need for a strong and effective credit risk management strategy for Saccos in Kenya which mostly offer medium amounts of loans predominantly to business people who cannot afford collaterals to get loans from the main commercial banks hence the risk of default. It is necessary to adopt a good strategy for risk monitoring and mitigation. Little is known on studies which have been done on effects of credit risk management strategies on credit recovery in SACCOs. This study therefore aims at closing this gap by identifying the specific determinants of credit risks management strategies that have a bearing on the credit recovery of the Saccos in Kenya with a view to recommending actions against each of the identified causes in order to assist Saccos' management improve on their credit recovery.

1.3 Objectives of the Study

1.3.1 General Objective

To determine the effect of credit risk management strategies on credit recovery in Stima Savings and Credit Co-operative Society - Kisumu in Kenya.

1.3.2 Specific Objectives

i.   To determine the risk avoidance strategy on credit recovery in Stima Savings and Credit Co-operative Society Kisumu.

ii. To establish the risk transfer strategy on credit recovery in Stima Savings and Credit Co-operative Society Kisumu.

iii. To assess the risk reduction strategy on credit recovery in Stima Savings and Credit Co-operative Society Kisumu.

iv. To investigate the risk retention strategy on credit recovery in Stima Savings and Credit Co-operative Society Kisumu.

1.3.3 Research Hypotheses

The study will be guided by the following hypotheses;

H_{01}:   There is no statistically significant effect of risk avoidance strategy on credit recovery in Stima Savings and Credit Co-operative Society Kisumu.

H_{02}:   Risk transfer strategy has no statistically significant effect on credit recovery in Stima Savings and Credit Co-operative Society Kisumu.

H_{03}:   There is no statistically significant effect of risk reduction strategy on Credit recovery in Stima Savings and Credit Co-operative Society Kisumu.

H_{04}:   Risk retention strategy has no statistically significant effect on Credit recovery in Stima Savings and Credit Co-operative Society Kisumu.

1.4 Scope of the Study

The study scope will be limited to Stima Savings and Credit Co-operative Society Kisumu. Stima Savings and Credit Co-operative Society is most reliable Savings and Credit Co-operative Society within Kisumu County in Kenya from ranking of Sacco's society of Kenya in the year 2013-2018,Stima Savings and Credit Co-operative Society is number 3 out of 212 Sacco's in Kenya. The subject scope of this study is effect of risk management on credit recovery at Stima Savings and Credit Co-operative Society in Kisumu. Kisumu is located at latitude -0.10221 and longitude 34.7617111, in the southern hemisphere. The geographical area of Stima Savings and Credit Co-operative Society is along Oginga Odinga Street opposite Barclays bank Kisumu near Kenya power company-Kisumu. The research will be done between February and June 2018.Both secondary and

primary data for the period 2016/17, and 2017/18 Government of Kenya financial year will be used.

1.5 Justification of the Study

The management of Savings and Credit Co-operative Societies will use the findings of this study as a source of information on the effectiveness of the loans collections strategy at the Sacco. In addition, the findings of this study will help the managers in formulating relevant loans collections procedures and policies that would increase the loans collections in the short-run and reduce the size of the bad debt in the long-run.

The policy makers in the Savings and Credit Co-operative Societies sector like SASSRA would use the findings of this study in formulation of policies regarding the types of loans, amounts of loans, requirements of borrowers and the processes of conducting loans collections in the Savings and Credit Co-operative Societies in Kenya.

The current and future scholars would also benefit from the findings of this research on the factors that determine the effectiveness of the debt collection strategies of lending institutions. The information is part and parcel of the established knowledge in the field of strategic management and would enable future researchers to come up with areas for further research

1.6 Conceptual Framework

This is a diagrammatic representation which conceptualizes the relationship between variables; independent   and dependent variables.

INDEPENDENT VARIABLE   **DEPENDENT VARIABLE**

CREDIT RISK MANAGEMENT STRATEGIES   **CREDIT RECOVERY**

| Risk avoidance |

| Risk transfer |

| Risk reduction |

| Risk retention |

CREDIT RECOVERY

- Client appraisal,
- Credit risk control
- Collection policy
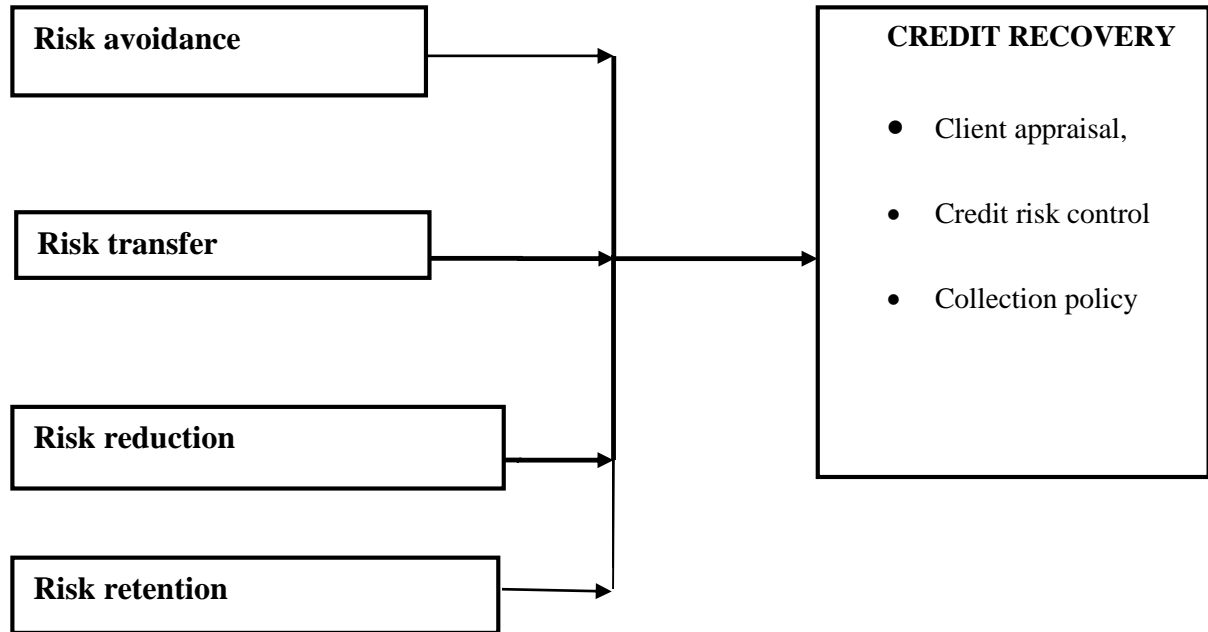
Figure 1.1: Relationship between credit risk management strategies and credit recovery

Source: Adopted from Apps (1996)

The conceptual framework for the present study is adopted from Apps (1996).This diagrammatic representation shows the relationship between credit risk management strategies and credit recovery at Stima Sacco. Independent variables include risk avoidance strategy, risk transfer strategy, risk reduction strategy and risk retention strategy, which affect dependent variables which is credit recovery.

2.0 LITERATURE REVIEW

The literature review presented in this chapter aims at providing a broader understanding of the major contract examined in the research.

2.1 Theoretical Review

2.1.2 Portfolio Theory

Modern Portfolio Theory (MPT) was introduced by Harry Markowitz in1952 and later changed it to portfolio theory since there was nothing modern about it. Markowitz (1952), the theory allows investors to measure the expected risks and returns, as given statistically, for their investment portfolios. Scheufler, (2002), noted that the information of MPT theory to default risk has lagged over the years, as default risk remains the largest risk faced by many financial institutions.

The theory suggests how risk-averse investors can construct portfolios to optimize or maximize expected return based on a given level of market risk, emphasizing that risk is an inherent part of higher reward. In 1952, the Nobel laureate Harry Markowitz, then a young doctoral student in operations research at the University of Chicago, demonstrated mathematically why putting all your eggs in one basket is an unacceptably risky strategy, and that diversification is the best deal for an investor or a manager of a company Bernstein (1996).

Rubinstein (2002) developed the idea that diversification is the best way to consider risk, subsequently applying this idea to the analysis of shares. He demonstrated how the variance of portfolio is mathematically related to the variance of each stock com-pared with that of every other stock and where there is a trade-off between the Expected return of a portfolio and its risk Eastham and Skitmore (1993). This theory suggest that the best way to reduce credit risk is to diversify the portfolio and this amount to transferring risk from one asset and sharing the risk among several assets in the portfolio. The theory in this study explains the objective of the effects of risk transfer strategy on credit recovery in stima savings and credit cooperative society Kisumu in that the theory looks at reduction of credit risk through diversification of assets in the portfolio.

The theory also relates with the second objective of credit risk transfer where all credit risks are not localized but spread in diverse portfolio. If there is a default in one portfolio, the others may not default.

2.1.3 Value at Risk Theory

The mathematics that underlies VaR was largely developed in the context of portfolio theory by Harry Markowitz. In particular, the focus on market risks and the effects of the movements in these risks are central to how VaR is computed. The first regulatory measures that evoke Value at Risk, though, were initiated in 1980, when the Securities Exchange Commission tied the capital requirements of financial service firms to the losses that would be incurred, with 95% confidence over a thirty-day interval, in different security classes; historical returns were used to compute these potential losses Manganelli and Engle, (2001).

This is a technique used to measure the probability of portfolio losses based on the statistical analysis of historical price trends and volatilities. VAR is able to measure risk while it happens and is an important consideration when firms make trading or hedging decision Manganelli and Engle, (2001). According to Jorion (2001), VaR measure the worst expected loss over a given horizon under normal market conditions at a given level of confidence. Bohman (2008) risk avoidance strategy is to examine the financial intuitions well-documented credit risk management policy that elaborates the products offered and all activities play an important role to manage the credit risk. Liuksila (1996) observed that the problem often begun right at the loan application stage and increased further at the loan approval, monitoring and controlling stages when credit risk management guidelines for credit processing are weak and incomplete.

The theory looks into the value of assets in the portfolio which is subjected to credit risk and the time period within which the credit risk is subjected to. Further the theory is in line with the objective on risk avoidance. It lays mechanisms to be put in place by Stima Sacco to avoid credit risks in the environment where it operates.

2.1.4 Asymmetric Information Theory

The problem of the economics of information and the special issue of asymmetries of information had been under discussion for some time prior to the crucial breakthroughs by Akerlof, Spence, and Stiglitz in the 1970s Barkley (2002). Information asymmetry refers to a situation where business owners or manager know more about the prospects for, and risks facing their business, than do lenders Eppy(2005). It describes a condition in which all parties involved in an undertaking do not know relevant information.

In a debt market, information asymmetry arises when a borrower who takes a loan usually has better information about the potential risks and returns associated with investment projects for which the funds are earmarked. The lender on the other hand does not have sufficient information concerning the borrower Edwards and Turnbull, (1994). Binks and Ennew (1997) point out that perceived information asymmetry poses two problems for the banks, moral hazard (monitoring entrepreneurial behavior) and adverse selection (making errors in lending decisions).

Banks will find it difficult to overcome these problems because it is not economical to devote resources to appraisal and monitoring where lending is for relatively small amounts. This is because data needed to screen credit applications and to monitor borrowers are not freely available to banks. Bankers face a situation of information asymmetry when assessing lending applications Binks and Ennew(1997). This theory supports the objective that investigate the effect of risk retention strategy on credit recovery at Stima Sacco in Kisumu. Risk retention strategy can only be effective if the Sacco management has adequate information upon which to base their decisions. The information on credit management strategy specifically risk retention requires lots of appraisals and due diligence to be done.

2.2 Credit Risk Management Strategies Concept

These are the various methods which financial organizations like banks and savings and credit cooperative societies employ to help them reduce credit risk and to improve on their credit recovery.

2.2.1. Concept of Risk Avoidance Strategy

Risk avoidance strategy is designed to deflect as many threats as possible in order to avoid the costly and disruptive consequences of a damaging event. A risk avoidance methodology attempts to minimize vulnerabilities which can pose a threat. Risk avoidance and mitigation can be achieved through policy and procedure, training and education and technology implementations.

Bohman (2008) risk avoidance strategy is to examine the financial intuitions well-documented credit risk management policy that elaborates the products offered and all activities play an important role to manage the credit risk. The institutions well organized credit manual that documents and elaborates the strategies for managing credit risk also the part of effective credit risk management and they have to formulate incompliance with the institutions credit policy. Strategies for granting credits also should focus on whom, how and what should be done at the branch and corporate division levels while assessing borrowers. Quantitative credit scoring models should be part of credit risk management mechanisms. Method used was quantitative research method.

2.2.2. Concept of Risk Transfer Strategy.

Risk transfer strategy concept risk management strategy in which an insurable risk is shifted to another party by means of an insurance policy. Risk shifting through non-insurance means, such as a warranty.

Nelson (2009), on concept of financial institution crises and credit recovery in Kenya: cause and remedies. The statement of the problem for the study is many financial institutions that collapsed in Kenya since 1986 failed due to non-performing loans. This study investigated the causes of nonperforming loans, the actions that financial institution's managers have taken to mitigate that problem and the level of success of such actions. Using a sample of 30 managers selected from the ten largest financial institutions, the study found that national economic downturn was perceived as the most important external factor. Customer failure to disclose vital information during the loan application process was considered to be the main customer specific factor. The study further found that lack of an aggressive debt collection policy was perceived as the main bank specific factor, contributing to the non performing debt problem in Kenya.

2.2.3. Concept of Risk Reduction Strategy

Risk reduction strategy concept attempt to reduce financial and operating risk by withdrawal from high risk ventures of risk pooling resulting in diversification. Refer to loss control and loss financing. Kibet (2008) on concept risk reduction strategy played a role in corporate governance. The limitations of the study were time constraints, restriction to state owned corporations and having to make prior arrangement in order to meet the heads of IADs. Recommendations of further study were effectiveness and contribution of internal audit in promoting corporate governance for companies listed in the NSE. Additionally, a study on the influence of internal audit and audit committee on financial reporting quality was recommended It requires careful planning and commitment on part of all stakeholders. It is encouraging to note that it's possible to minimize risks related losses through diligent management of portfolio and cash-flow, by building robust institutional infrastructure with skilled human resources and inculcating client discipline, through effective coordination of stakeholders improving management efficiency of the credit unions.

2.2.4. Concept of Risk Retention Strategy

A risk retention strategy concept is an alternative risk transfer entity created by the federal Liability Risk Retention Act. RRGs must form as liability insurance companies under the laws of at least one state its charter state or domicile. The policyholders of the RRG are also its owners and membership must be limited to organizations or persons engaged in similar businesses or activities, thus being exposed to the same types of liability. Most RRGs are regulated as captive insurance companies. However, RRGs domiciled in states without captive law are regulated as traditional insurance companies.

Macaulay (1988),on concept of investigated the adoption of credit risk management best practices in the United States and reported that over 90% of the financial institutions in that country have adopted the best practices. Effective credit risk management has gained an increased focus in recent years, largely due to the fact that inadequate credit risk policies are still the main source of serious problems within the industry. The chief goal of an effective credit risk management policy must be to maximize a financial sector's risk adjusted rate of return by maintaining credit exposure within acceptable limits.

Moreover, there is need to manage credit risk in the entire portfolio as well as the risk in individual credits transactions.

2.2.5 Credit Recovery Concept

2.2.5.1 Client Appraisal

Creditworthiness is a valuation performed by lenders that determines the possibility a borrower may default on his debt obligations. Lending institutions also consider the amount of available assets and the amount of liabilities to determine the probability of a customer's default.

2.2.5.2 Credit Risk Control

Credit risk control is most simply defined as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms. The goal of credit risk control management is to maximize a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters.

2.2.5.3 Collection Policy

The steps that a financial institutions follow in ensuring timely payment of its accounts receivable. It may involve a friendly phone call to make sure payments is made on time, followed by a firm phone call when a payment is late, followed by a threatening letter, and finally turning the client over to a collection agency. Companies may deviate from their collection policy for long standard or otherwise trusted customer.

2.3 Empirical Review

2.3.1. Risk Avoidance Strategy on Credit Recovery

Rupp (2007), credit risk management is a process that involves a series of steps; identifying and analyzing loss exposures through the appraisal technique, measuring loss exposures, selecting the technique or combination of techniques to be used to handle each exposure, implementing the techniques chosen and monitoring the decisions made and making appropriate changes. It is also the support, control systems and other practices necessary to manage the outstanding risk assets, normal repayment and to monitor business risk. The appraisal technique involves credit initiation, evaluation, negotiation, and approval of facility. As an important step in initiation process, credit officer should

visit the potential customer to gather information on client's business, mode of operation, management, and financial situation. Banks should base their credit analysis on the five C's principals of lending. It also refers to the capacity of the client as determined by their cash flows, and capital as determined by the client's real net worth. The collateral pledged for the credit facility is another aspect, and the condition, that is the vulnerability of economic fluctuations. In credit evaluation, a consistent and rating scheme to all investment opportunities should be applied if credit decisions are to be made in consistent manner which results in aggregate reporting of risk exposure.

Achou and Tenguh (2008) conduct a study in Nigeria on the relationship between credit risk management and bank performance and found that there is a significant relationship between financial institutions profitability and credit risk management in terms of loan performance

Musyoki and Kadubo (2012) conducted a study to assess various parameters pertinent to credit risk management as it affects banks' financial performance of Banks in Kenya between the periods of 2000 - 2006. The parameters covered in the study were; default rate, bad debts costs and cost per loan asset. Financial reports of banks was used to analyze profitability ratio for seven years (2000-2006) comparing the profitability ratio to default rate, cost of debt collection an cost per loan asset which was presented in descriptive, regression and correlation was used to analyze the data. The study revealed that all these parameters have an inverse impact on banks' financial performance, however the default rate is the most predictor of bank financial performance vis-à-vis the other indicators of credit risk management. The recommendation is to advice banks to design and formulate strategies that will not only minimize the exposure of the banks to credit risk but will enhance profitability and competitiveness of the banks.

Mwangi (2012) conducted a study on the effects of credit risk management of financial performance of commercial banks in Kenya using a modern ROE as profitability indicator while non-performing loan ratio and capital adequacy ratio as credit risk management indicators. This study showed that there is a significant relationship between financial performance and credit risk management. The results of the analysis states that both non-performing loans ratio and capital adequacy ratio have negative and relatively

significant effect on return on equity (ROE), with non-performing loan ratio having higher significant effect on ROE in comparison to capital adequacy ratio. Hence, the regression as whole is significant, this means that non-performing loan ratio and capital adequacy ratio reliably predict ROE.

Moti, Masinde, Mugenda, and Sindani (2012) conducted a study on empirical evidence of effectiveness of Credit Management System on Loan Performance on Microfinance Institutions in Meru Town and found out that credit terms formulated by the microfinance institutions do affect loan performance. The involvement of credit officers and customers in formulating credit terms affects loan performance. Interest rates charged had a negative effect on the performance of the loans, the higher the interest rates the lower the loan performance. Credit risk controls adopted by microfinance institutions have an effect on loan performance, credit insurance, signing of covenants with customers, diversification of loans, credit rating of customers, reports on financial conditions, refrain from further borrowing had an effect on loan performance (Kariuki, 2010). Collection policies adopted by microfinance institution had an effect on loan performance, stringent policy had a great impact on loan performance, and the lenient policy had an effect but was not as great as that of stringent policy.

Apps (1996), credit recovery is company's ability to generate new resources, from day-to-day operations, over a given period. Avkiran, (1995) further explains that financial performance is the subjective measure of how well a firm can use assets from its primary mode of business and generate revenue. Therefore, the general measure of the overall net income and cash from operations from firm's investment portfolio, in a given period of time, depicts the financial health of the company. A portfolio is a collection of investments held by an institution or a private individual. Sacco's earn financial revenue from their loan portfolio and other financial services in the form of interest fees, penalties, and commissions.

Gatuhu (2013) noted that credit recovery is the way Sacco's are seeking financial sustainability. Many Sacco's were restructured in order to achieve financial sustainability and finance their growth. Tucker and Miles (2004) studied three data series for the period between March 1999 and March 2001 and found that self-sufficient Sacco's are profitable

and perform better, on return on equity (ROE) and return on assets (ROA), than developing-world commercial banks and Sacco's that have not attained self-sufficiency. As such, to be sustainably self-efficient, Sacco's need to generate sufficient profit to cover expenses while eliminating all subsidies, even those less-obvious subsidies, such as loans made in hard currency with repayment in local currency", Tucker and Miles(2004). In order to optimize their performance, Gatuhu (2013) posits that Savings and Credit Co-operative Societies need to become more commercially oriented and stress more on improving their profitability therefore sustainably self-efficient.

Hermes and Lensink (2007), the financial systems approach emphasizes the importance of financially sustainable Savings and Credit Co-operative Societies that guarantee a large-scale outreach to the poor on a long-term basis. Achou and Tenguh (2008) also conduct research on Saccos and credit risk management and found that there is a significant relationship between credit risk management (in terms of loan performance) and credit recovery (in terms of profitability). Njiru's (2003) surveyed credit risk management practices against the performance adopted by coffee cooperatives in Embu district, Nduku's (2007) surveyed the credit risk management practices adopted by pharmaceutical manufacturing firms in Kenya, Wambugu's (2008) surveyed the credit risk management practices adopted by micro-finance institutions in Kenya and Kimeu (2008) conducted a survey of credit risk management techniques of unsecured bank loans of commercial banks in Kenya.

From the above literature review, it is evidence that these scholars used various research designs, methodologies, sample sizes and difference area to study about credit recovery of various institutions. They have also different result from their studies locally, little is known about relationship between risk avoidance strategy and credit recovery. Therefore there is a knowledge gap which the findings of this study to be done at Stima Sacco Kisumu will bridge.

2.3.2. Risk Transfer Strategy on Credit Recovery

Summers and Wilson (2000), in their study on trade risk transfer strategy and the decision to use factoring most firms involved in inter-firm trade offer to their customers. Factoring is a convenient financing method involving the transfer of title of the debtors, with or

without recourse, to the factor where the seller receives a discounted amount based on the face value of the accounts factored. In the UK corporate sector more than 80% of daily business transactions are on credit terms. There are wide variations between industries and firms in the credit periods offered and the terms and conditions underlying them. Trade credit is an important source of short-term finance for business and represents a substantial component of both corporate liabilities and assets, especially in the case of intermediate companies. Trade debtors is one of the main assets on most corporate balance sheets, representing up to 35% of total assets for all companies, and, of course, it is one of the riskiest. The management of trade credit (debtors) is, thus an important facet of short-term financial management and supplier-customer relations. They held, if a firm has such financing difficulties, factoring can be beneficial in two ways; firstly by making cash from invoices available more promptly and secondly by making finance available to firms which may not have the requisite level of fixed assets as collateral for loans.

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

Johnson & Scholes (2007), many managers find a process for developing a useful set of performance indicators for their organizations difficult. One reason for this is that many indicators give a useful but only partial view of the overall picture. Also some indicators

are qualitative in nature, whilst the hard quantitative end of assessing performance has been dominated by financial analysis. In an attempt to cope with this very heterogeneous situation, balanced score cards have been used as a way of identifying a useful, but varied set of key measures. Balanced score cards combine both qualitative and quantitative measures, acknowledge expectations of different stakeholders and relate an assessment of performance to choice of strategy.

A study by Dhakal (2011) on risk management in SACCOs found out that risk management is not imbedded into the SACCOs institutional cultures and its value is not shared by all employees. He also noted that given the capacity, introduction of sophisticated systems and technical tools risk management does not work in SACCOs and therefore they lack the capacity required for risk management. The study adopted descriptive research design study in which data was gathered just once over the period 2008 to 2010 for 35 SACCOs in Nairobi County registered by SASRA. The study was facilitated by use of secondary data. Multiple regression analysis was applied to the data to examine the effects of credit risk management on performance of SACCO"s in Kenya. Ogendo (2009), conducted a study on effect of Savings and Credit Co-operative Societies strategies on member"s savings mobilization in Nairobi, Kenya. The study found out that savings mobilization is a key component in any development endeavor as it is believed to be the surest way of increasing income and boosting productivity in attempt to eradicate poverty. The main purpose of the study was to determine the effect of cooperative strategies on members" savings mobilization and analyze the effect of intervening factor (family size, attitude, and income level on savings mobilization. The study utilized a sample of 30 SACCOs out of 2,500 and 180 SACCO members out of 150,000 in Nairobi area. These were selected through simple random sampling method. A semi structure questionnaire was used to collect data from 210 respondents.

Chen and Pan (2012) conducted a study on the a number of factors have contributed to this growth, including: greater focus by Saccos and other financial institutions on risk management; a more rigorous approach to risk/return judgments by lenders and investors and an increasing tendency on the part of Saccos to look at their credit risk exposures on a portfolio-wide basis; efforts by market intermediaries to generate fee income; a generally low interest rate environment, which has encouraged firms to search for yield pickup

through broadening the range of instruments they are prepared to hold; and arbitrage opportunities arising from different regulatory capital requirements applied to different kinds of financial firm. The significance of CRT seems to vary appreciably across firms and market segments. Thus, for example, the intermediation of credit default swaps seems to be a major business line for a small, but only a small, number of firms; and CRT markets are particularly active for major company credits, much less so for SMEs. Given these differences, it may be misleading to talk about the overall impact of CRT.

Rule, (2010) conducted the study on banks and insurance companies are exposed to various credit, market and insurance risks in the course of their business, and they can manage these risks in three ways: Arrange for another entity to take on the risk at the outset. For example, a bank might arrange a bond issue for a corporate customer rather than lending itself; or an insurance company might arrange for a customer to 'self-insure' by establishing a captive insurance company rather than buy insurance cover.

Peterson and Bohman (2008), conducted a study on risk transfer strategy of SACCO"s in Tanzania examined that the financial intuitions well-documented credit risk management policy that elaborates the products offered and all activities play an important role to manage the credit risk. The institutions well organized credit manual that documents and elaborates the strategies for managing credit risk also the part of effective risk transfer strategy and they have to formulate incompliance with the institutions credit policy. Strategies for granting credits also should focus on whom, how and what should be done at the branch and corporate division levels while assessing borrowers. Quantitative credit scoring models should be part of credit risk management mechanisms. Method used was quantitative research method. Carey (2001) conducted a survey of risk transfer strategy and found that on average the lowest percentage is on the measuring, mitigating and monitoring risk that is 69% score as compared to risk management policies and procedures that is 82.4%, and internal control of banks that is 76%.

Fatemi and Glaum (2000) found that there is significant difference between risk transfer strategy and credit recovery in risk monitoring and controlling. The United Africa Emirate Micro credit Unions have an efficient risk monitoring and controlling system and it has positive influence on risk management practices.

From the above studies, it can be revealed that the researchers used different research methods and approaches in conducting their research. They also carried them out in different regions .their results were not consistent too. Though research on credit recovery has been conducted in different institutions globally and regionally, little is known about the effect of risk transfer strategy on credit recovery in Stima Sacco Kisumu.

2.3.3. Risk Reduction Strategy on Credit Recovery

Essendi (2012) conducted a study on the effect of risk reduction strategy on loans portfolio held that credit management function facilitates efficient management and administration of the SACCO loan portfolio in order to ensure equitable distribution of funds and to encourage liquidity planning. Results indicated that formulation of the credit policy is largely done by members of the organization and regulation with moderate involvement of employees and the directors. The existing credit policy of the Sacco is the primary document upon which formulation of new credit policy is based, trends of creditors and overhead costs are also taken into account in the process of formulation. Descriptive research design was used with a target population of 106 licensed SACCOs from which a sample of SACCOs was identified from Nairobi County. The study used both primary and secondary data. Primary data was obtained through questionnaires and secondary data from Sasra reports. Data collected was analyzed using descriptive statistics and regression analysis.

Kargi (2011) conducted the study on the impact of credit risk on the profitability of Nigerian Saccos. Financial ratios as measures of Sacco performance and credit risk were collected from the annual reports and accounts of sampled Saccos from 2004-2008 and analyzed using descriptive, correlation and regression techniques. It concluded that Saccos' profitability is inversely influenced by the levels of loans and advances, non-performing loans and deposits thereby exposing them to great risk of illiquidity and distress.

Epure and Lafuente (2012) examined Sacco performance in the presence of risk for Costa-Rican Sacco industry during 1998-2007. The results showed that performance improvements follow regulatory changes and that risk explains differences in Saccos and

non-performing loans negatively affect efficiency and return on assets while the capital adequacy ratio has a positive impact on the net interest margin.

Olomola (2002) conducted the study on the repayment performance is significantly affected by borrower's characteristics, lenders characteristics and loan characteristics. Repayment problems can be in form of loan delinquency and default. Whatever the form however, the borrowers alone cannot be held responsible wherever problems arise; it is important to examine the extent to which both borrowers and lenders comply with the loan contract as well as the nature and duties, responsibilities and obligations of both parties as reflected in the design of the credit program rather than heaping blames only on the borrowers.

Linbo (2004) examined efficiency versus risk in large domestic USA banks. He found that profit efficiency is sensitive to credit risk and insolvency risk but not to liquidity risk or to the mix of loan products. Harker and Satvros (1998) conducted an empirical study on interest rate and exchange rate exposures of institutions in pre-crisis Korea. Results indicated that Korean commercial banks and merchant banking corporations had been significantly exposed to both interest rate and exchange rate risks, and that the subsequent profitability of Microfinance Institutions was significantly associated with the degree of pre-crisis exposure. The results also indicated that the Korean case highlights the importance of upgrading financial supervision and credit risk management practices as a precondition for successful financial liberalization.

Reta (2011) carried out a study on determinants of Loan Repayment Performance using on a Case Study in the Addis Credit and Saving Institution, Addis Ababa, Ethiopia.
Von Pischke (1991) noted that efficient loan sizes fit borrowers' repayment capacity and stimulate enterprise. If the amount of loan released is enough for the purposes intended, it will have a positive impact on the borrower's capacity to repay. On the other hand, in case of over and under finance, the expected sign is negative. If the amount of loan exceeds what the borrower needs and can handle, it will be more of a burden than help and extra funds may go toward personal use Norell, (2001), thereby undermining repayment performance. If the loan is too small, it may also encourage borrowers to

divert the loan to other purposes, Vigano, (1993). Godquin (2004) reported that both age and size of loans have an inverse relationship to repayment performance.

Hassan, (2010) conducted a comparative study of Handelsbanken and Swedbank and how risk has been managed during the last decade. In this thesis the authors strive to investigate the risk management phenomena in the banking sector by conducting a longitudinal comparative study in two different banks i.e. Handelsbanken and Swedbank. In a broader perspective to understand the phenomena the authors depart from theoretical framework that recognizes the social and cultural elements of risk. However, to be more specific the thesis narrows down its analysis to three main variables that come under the realm of this discussion which are; how banks organizing for risk, how they measure it and the role of IT and human judgment. This study contributes to the banking sector by providing a road map of how successful

Peterson and Bohman (2008), conducted a study on risk transfer strategy of SACCO's in Tanzania examined that the financial intuitions well-documented credit risk management policy that elaborates the products offered and all activities play an important role to manage the credit risk. The institutions well organized credit manual that documents and elaborates the strategies for managing credit risk also the part of effective risk transfer strategy and they have to formulate incompliance with the institutions credit policy. Strategies for granting credits also should focus on whom, how and what should be done at the branch and corporate division levels while assessing borrowers. Quantitative credit scoring models should be part of credit risk management mechanisms. Method used was quantitative research method. Carey (2001) conducted a survey of risk transfer strategy and found that on average the lowest percentage is on the measuring, mitigating and monitoring risk that is 69% score as compared to risk management policies and procedures that is 82.4%, and internal control of banks that is 76%. Fatemi and Glaum (2000) found that there is significant difference between risk transfer strategy and credit recovery in risk monitoring and controlling. The United Africa Emirate Micro credit Unions have an efficient risk monitoring and controlling system and it has positive influence on risk management practices.

The above reviewed studies indicates that these scholars used various research designs, methodologies, sample sizes and difference area to study about credit recovery of various institutions. They have also different result from their studies and locally little is known about relationship between risk reduction strategy and credit recovery at Stima Sacco's Kisumu. The study will therefore provide the Sacco with ways of reducing credit risks and promoting credit recovery.

2.3.4. Risk Retention Strategy on Credit Recovery

Swarens (1990), suggested that the most pervasive area of risk is an overly aggressive lending practice. It is a dangerous practice to extend term beyond the useful life of the corresponding collateral. Besides that, giving out loans to borrowers who are already overloaded with debt or possess unfavorable credit history can expose banks to unnecessary default and credit risk. In order to reduce these risks, banks need to take into consideration some common applicants" particulars such as debt to income ratio, business history and performance record, credit history, and individual loan applicants their time on the job or length of time at residence.

Pyle (1997), conducted a study on bank risk management held that banks and similar financial institutions need to meet forthcoming regulatory requirements for risk measurement and capital. However, it is a serious error to think that meeting regulatory requirements is the sole or even the most important reason for establishing a sound, scientific risk management system. It was held, managers need reliable risk measures to direct capital to activities with the best risk/reward ratios. They need estimate of the size of potential losses to stay within limits imposed by readily available liquidity, by creditors, customers and regulators. They need mechanisms to monitor positions and create incentives for prudent risk taking by divisions and individuals.

Korie *et al* (2012) conducted a study on determinants of loan repayment of Microfinance Institutions in Southeast States of Nigeria The objective of the study was to analyze the loan repayment performance, institutional factors, and factors affecting repayment rate of microfinance institutions (MFIs) in the South-east states of Nigeria. It was carried out in three states namely; Eboni, Enugu and Imo, out of the five southeast states. Using a cross-sectional data a multi-stage sampling technique was employed in selecting a total of 36

MFIs from the three states, that is, 12 MFIs per state. The three states were purposively selected based on the performance index of United Nations Development Program in the selection of Micro start Projects, which made the final list in the Southeast states of Nigeria. For the sample size, four MFIs were chosen each from formal (commercial and development banks), semi-formal (NGO-MFIs and community banks (CBs) and informal (Rotating Savings and Credit Associations (ROSCAS). Results from the study, affirmed that the formal segment was more organized, better equipped with higher quality and well-motivated staff than the semi-formal and informal segments. The informal sector presented the best repayment picture of the three segments, followed by the semi-formal institutions. Outstanding among the determinants of loan repayment of microfinance institutions were outreach, shocks, training duration, loan size and credit officer's experience.

Sanderson, (2011), conducted a study on business environment demands lean, cost efficient operations with no waste. As an important part of this process, risk managers seek to reduce the economic impact of risk on their organizations through opting for greater levels of risk retention. Risk retention analysis will help you decide how much risk you are able to retain which could be accomplished through risk rating models Amato et al, (2007). Gordy's, (2007) work shows that, knowing the right amount of risk to retain promotes financial efficiency.

Korir (2011) conducted a study on the impact of credit risk management practices on the financial performance of Deposit Taking Microfinance institutions in Kenya. The study used a descriptive survey approach in collecting data from the respondents. The number of the respondents was 36 staff working in all licensed Deposit taking microfinance institutions in Kenya.

Greuning and Bratanovic (2003) conducted a study on risk retention strategy include guidelines that clearly outline the scope and allocation of bank credit facilities and the manner in which the credit portfolio is managed that is how loans are originated, appraised, supervised and collected. Derban, Binner and Mullineux (2005) recommended that borrowers should be screened especially by banking institutions in form of credit assessment. Collection of reliable information from prospective borrowers becomes

critical in accomplishing effective screening as indicated by symmetric information theory. Qualitative and quantitative techniques can be used in assessing the borrowers although one major challenge of using qualitative models is their subjective nature. Ndwiga,(2011) investigated the relationship between risk retention strategy and financial performance of microfinance situations in Kenya. The objective of the study was to examine the effects of risk retention strategy on financial performance of Microfinance Institutions in Kenya

Gestel and Baesens (2009) risk retention strategy is primarily concerned with reducing earnings volatility and avoiding large losses. In a proper risk management process, one needs to identify the risk, measure and quantify the risk and develop strategies to manage the risk. The highest concern in risk management is the most risky products. The prior concern for the risk retention strategy is those products that can cause the highest losses: high exposures with high default risk.

Simiyu (2008) studied techniques of risk retention strategy in microfinance institutions in Kenya. To the researcher knowledge there is no known study done on impact of risk retention strategy on performance of microfinance institutions in Kenya, much of the work done relating to risk retention strategy on financial performance of microfinance institutions has been conducted in the developed world.

Pykhtin, (2005), risk retention strategy is an important function of financial institutions in creating value for shareholders and customers. The corporate finance literature has linked the importance of risk management with the shareholder value maximization hypothesis. This suggests that Microfinance will engage in risk management policies if it enhances shareholder value .Ali and Luft, (2002).

From the empirical studies it can be concluded that the result from the reviewed studies cannot be generalized since some use different sample sizes from different entities .They have also used different research designs and different research methods. Though the researchers have conducted studies on factors affecting credit recovery, little study have been conducted to find out the effect of risk retention strategy on credit recovery at Stima Sacco Kisumu. Therefore this study will seek to know the effects of risk retention strategy on credit recovery at Stima Sacco Kisumu

3.0 RESEARCH DESIGN AND METHODOLOGY

This chapter provides information on the research design, target population, sampling design, data collection instruments and procedures and data analysis and presentation.

3.1 Research Design

According to Mugenda and Mugenda (1999), research design is the outline plan or scheme that will be used to generate answers to the research problems. It is the structure and plan of investigation. The study will use a survey research design. In survey research, the researcher selects a sample of respondents from a population and administers a standardized questionnaire to them. The questionnaire, or survey, can be a written document that is completed by the person being surveyed, an online questionnaire, a face-to-face interview, or a telephone interview. The design will involve an in depth study of credit risk management and its effect on credit recovery of Sacco's in Kenya.

3.2 Target Population

Population is an entire group of individuals, events or objects having common or observable features Mugenda and Mugenda(2004) whereas Cooper and Emory (2001) defines population as the total collection of elements about which the researcher wishes to make some inferences .In this study, the target population consisted of credit staff and sales officer, credit managers within Stima Sacco, Kisumu. The target population consisted of 60 respondents

Table 3.1: Target Population Distribution

Population	Frequency	% Frequency
Credit staff	18	23
Sales officers	14	25
Credit Manager	28	52
Total	60	100

Source: **Stima Savings and Credit Co-operative Society Kisumu** (2018)

3.3 Sample Size and Sample Design

A sample is the number of items selected to represent the whole population (Kothari, 2004).Cooper and Emory (2001) defines sample size as the subject on which the

measurement is being taken as the unit of study. A sampling design is the method of selecting items to be observed for given study (Kothari, 2004). The researcher therefore will use census since the population will be small hence manageable. The sample population will therefore be 60 respondents. This include credit staff, sales officers and credit managers

3.4 Data Collection Methods

The study will use field tested questionnaires to collect data for the study. Questionnaires as defined by Sekaran (2006) include all techniques of data collection in which each person is asked to respond to the same set of questions in a predetermined order. In this study, personally administered questionnaires will be used. The researcher will use close ended questionnaires. The researcher acknowledged that personally administered questionnaires may be the best when the study is confined to a local area as in this case. Moreover, the researcher collected all complete questionnaires within a short period; clarifications was made on the spot in cases where respondents have doubt; and questionnaires could be administered to a large number of individuals at the same time resulting in cost and time saving thus its justification for this study.

3.5.1 Reliability of Research Instrument

Mugenda and Mugenda, (2003) defines reliability as a measure of degree to which researcher's instruments yield consistent results of data after repeated trials. They further indicate that reliability in research is influenced by random error. As random error increases, reliability decreases. Random error is the deviation from the measurements due to factors that have not been effectively addressed by the researcher. Such errors could be as a result of inaccurate coding, biasness of the researcher or respondent, and researcher's fatigue. Reliability of questionnaires will be tested on pilot data targeting 10 respondents. The Cronbach's Alpha Coefficients will be used and the questionnaire items with Alpha value of over 0.7 will be deemed reliable.

3.5.2 Validity of Research Instrument

Validity is the accuracy and meaningfulness of interference which are based on the research results Kats (2007). It is the degree of which results obtained from analysis of the data actually represent the variable of the study. In testing the validity and reliability

of questionnaires, questionnaires will be pre-tested outside the sample population using the test re-test method Kothari (2004). Pilot tests will be done and respondents will be guided on how to fill the questionnaires so as to eliminate or minimize errors.

3.6 Data Analysis and Data Presentation Method

Data collected will be compiled, sorted, edited, classified and coded in readiness for analysis. It will be analyzed using the SPSS software. The relationship between independent variables and credit recovery will be established through correlation analysis. The regression analysis and ANOVA will be used to test the effect of risk management strategies on credit recovery at Stima Sacco, Kisumu. The dependent variable will be Credit Recovery (Y), the four independent variables will be Risk avoidance (x_1), Risk transfer (x_2), Risk reduction (x_3) and Risk retention X_4. The relationship between the dependent and independent variables will be expressed as; $Y=\beta_0+\beta_1x_1+\beta_2x_2+\beta_3x_3+\beta_4x_4+\varepsilon$

β = coefficients of the regression

Y= Credit recovery

X_1= Risk avoidance

X_2= Risk transfer

X_3= Risk reduction

X_4 = Risk retention

ε= error term

Descriptive analysis will be done by the use of frequency distributions and presented in form of pie charts.

Presentation of data will be in form of pie chart and frequency tables which will provide successful interpretation of the findings.

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APPENDICES

Appendix I: Questionnaire

SECTION A: BIO DATA

Kindly tick (√) in the box next to the right option

1. Kindly state your Gender?

   Male   [ ]

   Female   [ ]

2. For how long have you been working in the Stima Sacco kisumu?

   Below 1 year   [ ]

   1-5 years   [ ]

   Over 5 years   [ ]

SECTION B: PROJECT RISK MANAGEMENT

Constructs of project risk management have been developed in this section. The main credit risk management strategies used are: risk avoidance, risk transfer and risk reduction

B_1: RISK AVOIDANCE

This sub-section shows a series of constructs on risk avoidance as a credit risk management strategy practiced in your organization. Please indicate your level of agreement/disagreement by ticking (√) against each of them in the space provided

Key: Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A) and Strongly Agree (SA)

	Constructs	SD	D	N	A	SA
$B_{1.1}$	The management of Stima sacco avoided risks through outsourcing	[ ]	[ ]	[ ]	[ ]	[ ]
$B_{1.2}$	The Stima sacco has a policy framework that ensures that all avoided risks do not affect service delivery to the customers	[ ]	[ ]	[ ]	[ ]	[ ]
$B_{1.3}$	Taking insurance covers are means of safeguarding risk	[ ]	[ ]	[ ]	[ ]	[ ]

B₂: RISK TRANSFER

This sub-section shows a series of constructs on risk transfer as a credit risk management strategy practiced in your credit recovery.. Please indicate your level of agreement/disagreement by ticking (√) against each of them in the space provided

Key: Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A) and Strongly Agree (SA)

	Constructs	SD	D	N	A	SA
$B_{1.1}$	The major avenue for risk transfer in the organization is through insurance	[ ]	[ ]	[ ]	[ ]	[ ]
$B_{1.2}$	The risk-transfer methods used in the county government make it them vulnerable to particular regional, sectoral or political shocks	[ ]	[ ]	[ ]	[ ]	[ ]
$B_{1.3}$	All the stakeholders are involved in deciding the risk transfer methods embraced by the organization	[ ]	[ ]	[ ]	[ ]	[ ]

B₃: RISK REDUCTION

This sub-section shows a series of constructs on negotiation as a project risk management strategy practiced in your credit recovery. Please indicate your level of agreement/disagreement by ticking (√) against each of them in the space provided

Key: Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A) and Strongly Agree (SA)

	Constructs	SD	D	N	A	SA
$B_{1.1}$	Risk reduction is achieved through stakeholder analysis which are done before project implementation	[ ]	[ ]	[ ]	[ ]	[ ]
$B_{1.2}$	The management always engages stakeholders with a view of making them part and parcel of the credit risk management	[ ]	[ ]	[ ]	[ ]	[ ]
$B_{1.3}$	Employee training reduces the risk of deviating from credit risk management	[ ]	[ ]	[ ]	[ ]	[ ]

Thanks for your cooperation

Appendix II: Work Plan

Activities	January 2018	February 2018	March 2018	April 2018	May 2018	June 2018
Writing a research proposal	■					
Consultation		■				
Submission of research proposal		■				
Data collection			■			
Data analysis and processing				■		
Submission for defense					■	
Defense						■

Source: **Stima Savings and Credit Co-operative Society -Kisumu** (2018)

Appendix III: Budget

S/NO	ITEM	DESCRIPTION	ESTIMATED AMOUNT IN (KSH)
1	STATIONARY	Flash disc @ 2,000	2,000
		10 pens @ 100	1000
		5Reams of photocopying papers @ 400	2000
		Printing and typesetting 5000	5000
2	INTERNET	Browsing and phone call costs	5000
3	TRAVEL AND ACCOMODATION	To and from the company and other data collection sites	10000
4	MISCELLENIOUS		20000
	TOTAL		45000

Source: **Stima Savings and Credit Co-operative Society -Kisumu** (2018)