Debt Collection Techniques and Profitability of Deposit-Taking Savings and Credit Cooperatives in Western Region, Kenya

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Abstract
The high rocketing level of non-performing loans, in the Kenyan Money Lending Industry has been a big bottleneck to the economic success and stability. The major problem is unstable profit, which keeps on fluctuating because of default rate by customers because of weak credit-risk mitigation strategies. This has led to profit decline by 30.0 percent from 2019 to June 2020. The assets quality is deteriorating, with the ratio of non-performing loans to gross loans also rising from 12% in December 2019 to 13.1% in June 2020. The stock of non-performing loans has been fluctuating as follows; in the year 2017 the NPL stood at 6.14%, in 2018 NPL increased to 6.30% and reduced to 6.15% in 2019, this depicts some inconsistency and profitability is affected in the same way. Therefore, Credit risk mitigation is an important activity that banks and Sacco's have to carry out in order to survive the increasing competition in the sector. The study sought to; determine the effects of debt collection techniques on profitability of deposit-taking Sacco's in western region-Kenya. The study was, anchored on Credit risk theory. Moreover, further supported by modern Portfolio theory and Capital Asset Pricing Model (CAMP). The researcher adopted a descriptive survey research design. The study's unit of analysis were deposit-taking Savings and Credit Cooperatives comprising- Ng'arisha, Stawisha, Invest and Grow, Wevasity, Faridi and Vihiga county farmers savings and credit cooperative society limited. The study target population comprised of 273 respondents drawn from the Board of Directors, CEO, Finance Officers, Credit Officers, Auditors and Loan Appraisal Officers selected. Yamane's formula and disproportionate stratified random sampling technique was used to calculate the sample size of 162 respondents for the study. Primary and secondary data collection techniques employed, Validity of the research instrument that is content, construct and criterion validity established using expert judgments, while Cronbach's Alpha Coefficient measured internal consistency. The alpha coefficient of above 0.70 considered reliable. Data subsequently analyzed using descriptive statistics and inferential statistics. Multiple regression analysis was used to test the hypotheses for possible rejection or acceptance. Descriptive results interpreted using tables, means and charts. The findings guides government in policy formulation, industry in practice and scholars for further research. The study revealed that there is positive and significant relationship between debt collection techniques, $(R=0.591, R^2=0.350, P<.05)$, on profitability of deposit taking Sacco's. Based on the findings the study concluded that debt collection techniques is key to profitability among deposit taking Sacco's in western region, Kenya. The study recommend that DT Sacco's need to explore other credit mitigation strategies to strengthen Sacco's profitability. This enables them further capitalize, and maximize on Sacco's operations and minimize on less profitable ventures.

I. Introduction

1.1 Background of the study

A sound financial system is a key factor in the development of a Savings and credit cooperatives while dismal performance could have a negative impact on the nation's financial growth and profitability (Biwott et

al., 2015) It is quite clear that financial institutions are crucial and of immeasurable benefit to the provision of credit to customers. However, globally firms are facing competition challenges as well; hence, they are looking for ways of improving profitability by carrying out prudent credit risk mitigation strategies, which includes: debt collection techniques, credit qualification terms and credit risk mapping (Sharifi et al., 2019). Credit risk has become a serious concern for savings and credit cooperative societies worldwide, this has led to commitment by SACCOs to prudential credit risk mitigation strategies (Richard et al., 2008) for increase in profitability. Consequently, many savings and credit cooperative societies are devising credit mitigation strategies that minimize or prevent credit crisis and loan losses (Gweyi, 2013). Credit-risk mitigation strategies are majorly the main factors that influences the profitability, growth and survival of different organizations.(Hoyt, 2003), concerning this concept as an arrangement whereby the acquisition of products was done with no down payment made upon contractual agreement for later payment. Stein, (2019) defined risk mitigation as the practice of identification, measurement, analysis, and control of risk. Firms mostly gain from some sound credit mitigation strategies if the proceeds of sales surpass the total costs of credit (Markowitz, 1952).

Debt Collection techniques sets out a clear, equitable, accountable, and transparent process for debt management, and collection strategies. The techniques also assists in ensuring that all debts received by the due dates, and or followed up within specified period of time (Morwabe & Muturi, 2019). Effective debt management is crucial to the success of any organization and every organization needs effective strategies to support the maximization of debt collection in an efficient manner. Gitau Muigai, (2018) contends that if a business fails to institute measures for recovering its additional cost of late payment, including other costs such as interest charged, then its profits affected by any overdue account. An effective credit policy acts as the guide for companies to communicate with and handle its first-class customers as assets (Pike & Neale, 2003). Moreover, Gitau Muigai, (2018) is of the view that credit policy establishes an agreed collection of goals for a business and acknowledges the credit and collection function as an important supplier to the company's objectives. A sound credit mitigation is about establishing and implementing a credit policy, debt collection policy, credit terms and credit risk mapping. Liquidity and insufficient working capital issues caused by inefficient credit standards and poor credit policies present companies with numerous challenges.

Globally, research on credit risk mitigation strategies and profitability of the organizations have been conducted (Boushnak *et al.*, 2018) but little seems to have been done on Sacco's .In England, a research on bank failures exhibited that from the sixty-two banks that were in operation prior 1984, situations of delayed advances and loan repayment were experienced (Sabrani, 2015) . Incapability to prudently manage loans would drive to buildup of Non-performing loans that harmfully affect profitability of commercial banks (Wanjira, 2016) and (Tushaj & Sinaj, 2020). In Saudi Arabia well-functioning financial institutions fastens economic growth, whereas a sick functioning financial institutions holds back economic growth and increases poverty (Muye et al., 2017). In the recent past, there has been an enlarged number of considerable high default rate challenges in developed and evolving economies.

Globally, Ntiamoah *et al.*, (2014) researched on how credit management practices associate with loan performance on certain microfinance in Ghana, more specifically in the greater Accra region. The research discovered that substantial relationship in the midst of credit risk avoidance and performance. Nevertheless, the inquiry failed to ascertain whether, there was substantial effect on methods of debt collection policy and portfolio performance. The research gap that this study shall address is the difference in sample sizes, unit of observation and study area. Since most of the reviewed studies used relatively smaller sample sizes of below 100 while, this study used a higher sample size.

Regionally, (Paulino, 2018) did a research on the consequences of managing credit risk on fiscal outcomes of CBs in Juba city, Southern Sudan. The research wanted to find out the degree to which risk avoidance used in credit risk management. The study was mainly concerned with the effect that it related to credit-risk mitigating to fiscal results of the banks. Eighty bank employees targeted in the study from the credit department. Descriptive research design adopted and primary data collection technique used. Data was analysis done using SPSS Version 26. The project discovered that most banks had a weak debt collection policy, which affected financial performance. Simple regression used, found to be limited when comparing with multiple regression results. The study employed both simple and multiple regression.

In Kenya, Mwai, (2015) conducted a research on the effects of debt financing on financial performance of NSE listed companies. The study used quantitative research design and data analyzed using linear regression models. Three regression models utilized. One, with return on asset as the dependent variable and total debt, long-term debt and short-term debt as the independent variables. The findings revealed that, short-term debt negatively correlated to return on assets but not significantly. Long-term debt was also, negatively correlated to return on assets but less significantly than short-term debt. Hence, this called for developing a credit policy. This was to manage the short-term, and long-term debt because they have a negative correlation to profitability that affect profitability of the firm.

1.2 Statement of the problem

The sky rocketing level of non-performing loans, in Kenyan money lending industry has been an obstacle to economic growth and stability. This is because of unstable profitability due to high default rates and weak credit-risk mitigation strategies (Dinger, 2009). This has led to profit decline by 30.0% from 2019 to June 2020. The assets quality is deteriorating, with the ratio of non-performing loans to gross loans also rising from 12% in December 2019 to 13.1% in June 2020.

The stock of non-performing loans has been fluctuating as follows; in the year 2017 the NPL stood at 6.14%, in 2018 NPL increased to 6.30% and reduced to 6.15% in 2019, this depicts some inconsistency and profitability affected in the same way. As at September 2019, various institutions still owed SACCOs sum of Ksh 3.86 Billion in unremitted deductions. Only partly sum of Ksh 3.42 Billion were deductions meant for repayments of loans and other credit facilities issued to members by the SACCOs. The allowance for loan loss, which were defaulted for the year 2019, increased to Ksh 19.38 Billion from Ksh 15.27 Billion recorded in 2018.

These instances imply that credit risk mitigation remains a problem (The SACCO Supervision Annual Report, 2019). When the loans and advances transform to non-performing, banks and Sacco's liquidity and earnings are adversely affected. Although, the Authority issued short-term administrative directives to SACCOs, in view of addressing the problem, long-term policies as well as legal interventions needed to reverse the situation (SASRA, 2019).

Strong risk mitigation strategies assists financial institutions reduce their risks exposures by adopting credit-risk mitigation strategies. This enhanced their ability to compete well in the industry (Kalu & Amu, 2018). Although, previous researches provide crucial research findings on Credit Management, they provide little clear-cut connection between Credit risk mitigation strategies and profitability of Sacco's. This scenario exposes a glaring gap raised by empirical studies, and considering the drawbacks presented to Sacco's in Kenya, including NPL, it is vital to carry out research on credit mitigation. Besides, it is for Saccos to control credit risk to minimize losses and foresee future existence and growth. The study sought to address the effects of credit mitigation strategies on profitability of deposit-taking Sacco's in Western Region, Kenya.

1.3 The Specific Objective

i.   To establish the effect of debt collection techniques on profitability of Deposit-taking Saccos in Western region, Kenya.

1.4 Research Hypothesis

H_01. There is no significant relationship between debt collection techniques and profitability of Deposit-taking Saccos in Western Region, Kenya

1.5 The Study Significance

The research findings offers DT-Sacco's administration with unbiased regulations on credit risk mitigating strategies. In addition, it will pin point those practices hampering prudent application of credit risk mitigation in their companies in order for directors to concentrate on such areas.

The study provides adequate and sufficient information to the regulatory bodies on the obstacles DT Sacco's are exposed to in dealing with credit-risk mitigation strategies. This information assists in improving existing policies and developing new ones for effective credit management. The study enabled Government form of intuition into the objective of strengthening financial services of SACCOs. The much needful information puts the Government in a position enabled to know which policies needed for implementation. This in turn ensure smooth running of DT-Sacco's in the country. The study also provide essential information to individuals who want to borrow from the Sacco.

The current study served as a useful source of reference; for researchers, students, policymakers, bankers, economists, and other stakeholders interested in the relationship between credit-risk mitigation strategies and the profitability of the Sacco's. In addition, open up new areas for inquiry. This research also adds to the common form of mastery on credit-risk mitigation strategies in deposit-taking Sacco's.

1.6 Scope of the Study

This study specifically focused on credit-risk mitigation strategies on profitability of deposit-taking Sacco's in Western Region, Kenya. The Non-deposit taking Sacco's within and all the Sacco's outside the study area was not included in the study.

The Western Region of Kenya, which borders Uganda, is among the former Kenya's seven administrative provinces prior to 2013. The study only covered; Kakamega, Bungoma, Vihiga and Busia Counties.

The Risk mitigation strategies operationalized into debt collection techniques, credit qualification terms, and risk mapping. The Debt collection policies measured by regular reporting and compliance on

outstanding agreements, Procedure for timely liquidation of collateral, applying internal control in overlapping manner, use of loan recovery agencies (auctioneers) and loan default follow-up mechanism. Credit qualification terms was measured by use of good documentation, procedure for timely liquidation, covenant/collateral checklist, borrowers' repayment history and ability to pay, credit period, and the legal environment. Finally, credit risk mapping measured by existence of a risk-mapping scheme, existence of a well-defined and risk appetite register, well defined risk exposure units, risk identification according to likelihood of occurrence and loan loss/default provision.

Government regulations through SASRA act as the moderating variable while; Profitability as dependent variable. Profitability measured by ROE, which comprised total assets, total liabilities, shareholders' capital and net income. The target population consisted 273 employees of the deposit-taking savings and credit cooperatives. The researcher used a maximum period of three months that is June 2022 to July and August 2022 to gather data and compile the final report.

1.7 Assumptions of the Study
The research assumed that, the legal frameworks on Sacco's regulation was not changed, free and timely access to all available information. Additionally, that SACCOs are risk averse.

II.   Literature Review

2.1 Theoretical Review
The research study anchored on Credit risk theory. In addition, supported by Modern Portfolio theory and Capital Asset Pricing Model (CAPM). Discussed in the preceding sections as follows.

2.2.1 The Credit Risk Theory
People have been experiencing credit risks for ages. There has been very little literature (Musa & Nasieku, 2019). Melton introduced credit risk theory in 1974. According to Ngugi et al., (2012) the theory emphasized that the management should keep checks, and monitor all the information including but not limited to screening of the borrowers' ongoing creditworthiness and adherence to the contract terms. It also explains how the money oriented institutions such as commercial banks deal with uncertainties. This is when they arise during the credit servicing periods.

Afande & Uk, (2014) stated that money loaning to customers continuously encompasses some features of credit risks emanating from situations that result from the failure to honor loan obligation when they fall due. According to Mabonga & Kimani, (2017) applications of credit risk theory is that the financial institutions should place key considerations to the borrowers' ability of repayment before issuance of the loan.

The first critique of the theory is that, the parameters of determining borrowers' credibility are dynamic. Sometimes, specific to a particular organization. Therefore, it is not a good practice to provide standard parameters without cognizant of situations dynamics of each financial institution it faces. However, a credit environment cannot operate on assumptions that every institution guided by its circumstances to evaluates borrowers' credit ability.

This concept is relevant to the research given it was to determine effects of credit mitigation strategies on profitability of DT SACCOs. In addition, the theory outlined the regulatory process and structure followed by SACCOs for internal control purposes.

2.2.2 Modern Portfolio Theory
Modern Portfolio theory was introduced by Markowitz, in 1959**.** The theory was later simplified by Mangram, in 2013. This concept based and built on two major economic decisions, which are; risk and returns. The notion suggested that there has to be reimbursement in terms of returns for accepting some risks. Investors usually prefer investing in projects that are in line with their risk profile as far as return and risk are concerned. As a principle, this theory takes into account that it is not always that the expected results are realized to the last digit.

The theory appreciates that risks are the chances of deviation of actual returns from the planned returns. According to Richard et al., (2008) this notion assumes the investors to be risk averse, rational and the markets are efficient and absorbs information quickly & perfectly. These depicts that the investors making decisions out of purpose as opposed to perception. Hence, they are aware of when to invest or not to and they are capable of predicting the variations in the market. Consequently, deduced that firms may use this theory stipulation to mitigate on risks facing them. According to Omisore, (2012), MPT advocates the diversification of assets as a risk mitigating strategy. All factors held constant, investing in different classes of assets acts as a safeguard in the event of volatilities in the market. Put differently, this theory encourages investors to have a variety of assets

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in their portfolio. Companies should weigh the risks and returns of the various classes of assets and, pick the one that maximizes members' wealth.

According To Hoyt, (2003) noted that the consideration of the firms all risks in a holistic manner guides the organization to achieving its goals. This was the basic working of credit-risk mitigation strategies to reduce the volatility of companies earning, share prices and reduces the cost of capital. The theory is crucial to the study since it helps in informing the directors of the Saccos to have a diversified portfolio than investing in an index portfolio. Hence, reducing risks to achieve high returns, it also helps in shedding light on the role of risks in influencing the returns of investments. Further, it helps on developing insights credit risk mapping to diversify the loan portfolio hence reducing risks in the event the borrower defaults.

2.2.3 The Capital Asset Pricing Model Theory

In 1965, Sharpe and Lintner advanced the theory. The theory explain the relationships between risks and returns. The CAPM is a balanced appraising model that sees the equality degrees of return on assets as a function of covariance with their market portfolio. Clearly, it states in what way a risk that cannot be, eradicated through diversification really influences the expected rate of return of an asset. Prolonged by Harry Markowitz's concept, ideas of methodical risk and explicit risks are disintegrated. The methodical risks are those attached to the market. When the market shifts, particular assets are somewhat upset in that all the assets take part in the overall market changes, such asset comprises methodical or market risk. However, specific risk are those risk which are exceptional to individual assets. They symbolizes elements of the asset's return which is usually does not correlate with the overall market changes (Pdf, 2015).

However, the explicit risk due to intrinsic issues like change of management, revolution of an operating system, reengineering of business process and strategies employed to an asset. These particular alterations in the institution may actually drive to some effects that might reduce or upsurge the total risk for the organization. Hence, explicit risks might be, spread. This was at all times be subjected to the institute's style. Different institutions have unlike specific risks in relation to their mode of approaching them, (Beyhaghi & Hawley, 2013).

Systematic risks are those that cannot be, eradicated, by means of diversification. Majorly, they occur because of the changes of assets values because of the uncertain huge factor changes in the economic atmosphere. These risks are mandatory for adoption because they are essential. It does not bother an organization to hire the best employees, either to have the best proficient system or not, but considering them in making decision is important. For instance, an organizations' performance affected by economic inclinations. Under CAPM, risks linked to assets measured in liaison to the entire market (Rossi, 2016).

In assessment of this circumstance, bearing in mind the conventions that investors are uniform and risk averse, for them to invest, they need to be motivated, and usually they go for a rate of return that reimburses them well for risking their funds at the end of the investment period. Because it is not possible to remove risk completely, CAPM aids financiers to compute the likelihoods of different expected returns and make proper decisions. This model however, has key conventions that; a risk free asset exists hence investors are able save or lend unrestrictedly at this rate, the market is efficient and the quantities are fixed, assets are perfectly divisible and there are no taxes and transaction cost (Jecheche, n.d.).This model was applicable to the study because it employed to explain the objective on credit risk mapping and profitability.

2.3 Empirical studies

According to (Karanja et al., 2015) credit risk mitigation is taking measures to decrease detrimental effect. When mitigating risk, it is prudent to advance strategy that strictly relate to and is equivalent to your firm's profile.

2.3.1 Debt Collection techniques and Profitability.

Policy, (2016) stated that a debt collection techniques provides clear guidelines; accountable, equitable as well as transparent techniques followed for debt management and collection efforts. The policy further assist in ensuring that all debts received by the due dates or followed up within specified timeframes. In addition, outlined principles to guide it operations as; accountability and transparency, fairness and equity. This confirms that parties who incur debts do so on the understanding that the prescribed repayment terms. Thus, the team providing goods and/or services to the debtor will be responsible for completing the documentations required. Debt recovery and Risk management underpin decisions made in relation to credit and related debt management process. In reducing the risks of non-payment of debt, a structured collections and recovery processes applied.

Is the human dignity of individual debtors at risk, (2020) states that in 2018, the EU Commission presented a legislative package to tackle Non-Performing Loans (NPL). The paper objective was to document how borrowers in financial difficulty are treated. This is because the range of credit available has become vast. Personal loans, credit card debt, overdrafts, personal credit and student loans are commonly, found across the

EU. The use of harassment and abusive debt collection practices are common in Europe. The current study shall focus on the policy adopted by the Sacco's. Moreover, how it affects profitability and the role of SASRA regulations.

According to Carlson H, (2018) in Ghana, he defined Credit risk as identification, analysis, assessment, control and avoidance. Additionally, minimizing or eliminating of unacceptable risks. In an attempt to manage and reduce risks, organizations used risk assumptions, risk avoidance, risk retention and risk transfers. Moreover, combination of strategies in a proper management of future events. Carlson H, (2018) further explained risk mitigations as identification of potential risks in advance and analyzing them. And taking precautionary steps to reduce the risks to acceptable levels. The implications of this is that, when an entity makes investment decisions, it exposes itself to financial risks.

The value of these risks depends on the types of financial instruments involved. The financial risks might be in the form of volatility in the capital market, recession, high inflation and bankruptcy. So in order to minimize and control the exposure of investment to such risks, fund managers as well as investors must practice risk mitigations. Disregarding importance of risk management while making high profile investment decisions might cause disasters on investments. He further stated that risk can be mitigated through, Covenants, Diversification, Risk based pricing, Tightening, deposit insurance and credit insurance/ derivatives (Carlson H, 2018).

Paulino, (2018) states that credit risk mitigation forms part of critical control measures globally among lending institutions in South Sudan. The study targeted 80 bank employees in the credit unit and employed descriptive research design. Structured questionnaire used in collection of primary data and linear regression analysis applied.

The study established that efficient credit mitigation requires lending institutions to efficiently, and intelligently manage customers credit lines. Thus, most financial lending institutions have collaborated with credit reference bureaus to share customers' credit histories to facilitate appraisal. This helps financial lending institutions to minimize exposure to bad debts. However, the study raised a glaring gap on the need for financial institutions to have in place clear defined strategies on risk mitigation strengthen and enhance their training regarding risk mitigation, the need to vary the methods of risk analysis as well as appraisal by benchmarking with other blue-chip companies.

Muthii Wanjohi, (2017) inspected the ascendancy of credit-risk mitigations on conduct of CBS in Kenya. In realizing this goal, the research evaluated the existing risk management practices of CBs and related them with the institutions financial presentation, the researcher employed a descriptive study design, the population for this study was forty three CBs and one mortgage firm, In cooperation Secondary and primary data stood used. Primary input was used by which the researcher administered questions in person and secondary input from various bank reports. The project used multiple regression examination in information analysis and findings were shown by way of tables and regression equation.

The use of inferential statistics applied to inspect the association amid the financial risk management and the bank's profitability. The F-test remained employed to weigh how healthy is the set of independent variables as a set, describes the change in the dependent range of values. The investigation applied T-test to weigh the implication of the single coefficient of limiting factors. The research established that most of banks in Kenya were exploiting prudent financial risk administration and thus the financial risk administration had an affirmative relationship to the profitability of commercial banks. In this investigation, independent variable is financial risk management, which was used to generalize various types of risks related with financing. This comprises; liquidity risk, foreign exchange risk market risk, interest ratio risk and credit risk. The current study shall focus on credit risk mitigation, the unit of study shall comprise of DT SACCOs in Western Region, Kenya.

Credit risks remains to be the leading set back through in all industries. The utmost fundamental task in SACCOs entirely is loan repayment defaults (Afriyie et al., 2019).

According to Antony & Otuya, (2019) researched on loan collection policies and Sacco financial performance in Kakamega County, Kenya. The study supported by Modern portfolio theory. The study findings showed a positive correlation between loan collection policies and financial performance. The current study addressed the gap of credit risk mitigations. Western, Kenya is bigger than Kakamega County; also, ROE as opposed to ROA, which may give different results, measured by the depended variable.

According to (Koduk, 2015) analysis on, in what way credit strategy influence performance of Sacco's in Nairobi. The analysis employed correlation research design. All the 40 Saccos registered by SASRA pursuant to society's act within Kenya consisted the research population. The inquiry discovered that governed Saccos had put in place standards and policies in relation to loan ratio for determining the client's credit worthiness to shun risk. The study further indicated that governed Saccos were moreover using collection policy, bearing in mind unserviced loans and overall loans, loan valuation allowance ratio and applying policies which amplified Return on Assets (ROA) for the governed Saccos and reduced credit risk to a great extent. Significantly, this

lead to increase in profitability. The current study shall only base on deposit taking Sacco's in Western region, Kenya that may give a different results.

(Juma et al., 2018) studied to ascertain the consequences of managing credit on fiscal results of DT-Sacco's in Nakuru town, Kenya. The research intentions were to ascertain the repercussions of credit avoidance on the fiscal results of Sacco's. Descriptive research design adopted; 220 employees targeted from the chosen Sacco's in Nakuru town. Stratified random sampling style was utilized for selecting a sample size of 74 employees. Primary data collection technique was used by use of queries, data was scrutinized by use of inferential, and descriptive statistics using SPSS. The regression results showed that credit avoidance had undeniable implications on financial performance of Sacco's. The current study used primary and secondary data approach using questionnaires.

Serwadda, (2018) revealed credit risks management effects on profitability of Ugandan commercial banks. The findings portrayed that profitability inversely impacted by non-performing loans. This further exposed them to large degrees of illiquidity and financial crisis. The researcher recommended banks to enhance credit-risk mitigation strategies to earn more profits and maintain a good qualitative asset portfolio.

Mudanya1 & Muturi, (2018) noted strong correlation between profitability and credit risk. This strong relationship found to be statistically significant. The study further asserted that increase in credit risks lead to decrease in profitability of the firm.

2.4 The Conceptual framework.
The conceptual structure shows the credit-risk mitigation strategies as independent variables and profitability as the dependent variable.
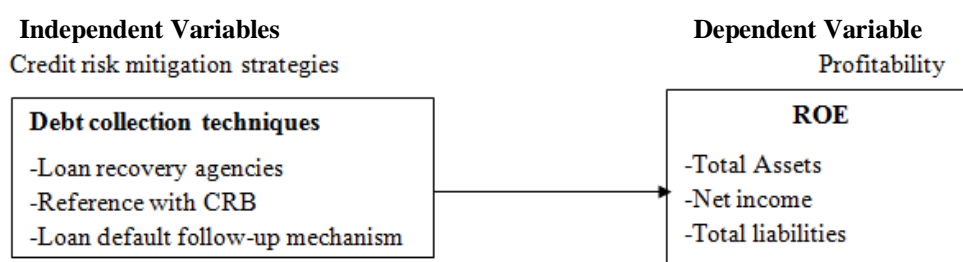

Figure: 1 Conceptual framework.

Source: Researcher

III.   Research Methodology
Based on Kothari (2014), the study used a descriptive survey research design. This study design provides a way to understand the link between variables; independent and the dependent. It enables the researcher to respond to "What" question, which is the case for the study. The study focused on deposit taking SACCO'S in western region Kenya. In this study the unit of respondents comprised 273 respondents drawn from members of the board of directors, Yamane's formula was used with disproportionate stratified random sampling to calculate sample size of 162 respondents D. Of et al., (2020). The researcher used structured questionnaires in collecting primary data on a 5-point Likert scale and document review in secondary data collection. The pilot study was conducted in Trans-Counties Sacco Society Limited and Trans-National Times Sacco Society Limited in Trans Nzoia County to evaluate reliability and validity basing on 16 questionnaires according to Simon M.K. (2011).

Data was analyzed in form of descriptive and inferential statistics using Statistical Package for Social Sciences (SPSS) version 24 software

IV.   Data Analysis And Discussions
4.1 Descriptive Statistics for the Study
4.1.1. Debt collection techniques.
The respondents were asked to give their opinions on how they agree or disagree with the statements on Linkert scale of 1 to 5, where 1= Strongly Disagree, 2= Disagree, 3= Undecided, 4= Agree, 5= Strongly Agree. The findings are as tabulated in table 4.1 below

Table 4.1: Debt collection techniques

	Debt collection techniques.	5	4	3	2	1	Mean	S.D
1	Credit officers on a regular basis report on the company's compliance with all of its outstanding agreements	8.6%	18.5%	31.5%	37%	4.3%	2.90	.470
2	Sacco's monitor the borrower's principal and interest repayments, account activity.	30.2%	19.1%	20.7%	20.0%	10.0%	4.80	.419
3	There is a procedures for timely liquidation of collateral	15.4%	16.0%	27.6%	38.5%	2.5%	4.83	.395
4	Referencing with CRBs helps in determining potential defaulters.	85.8%	12.3%	1.9%	0.0%	0.0%	4.84	.416
5	Internal controls are applied in an overlapping manner to reduce risks	20.9%	21.8%	24.2%	26.1%	7.0%	4.06	.724
6	Loan recovery agencies (auctioneers) are used to recover the bad debts	25.7%	20.0%	16.2%	29.10%	9.0%	4.47	.670
7	There is a loan defaulters follow-up mechanism in place	20.9%	22.1%	25.0%	19.5%	3.5%	4.68	.468
	Average						**4.63**	**.509**

Source: (Field Research data 2022)

Debt collection techniques is a continuous process and the researcher wanted to establish the extent to which respondents agree to various techniques. The data findings revealed that 85.8% strongly agreed that referencing with CRBs helps in determining potential defaulters while 12.3% agreed. It was also; found that, as seen in table 4.1, that 1.9% were undecided. In general, it was evident that majority of respondents at 85.8% agreed that referencing with CRBs helps in determining potential defaulters and it was highly rated with a mean of 4.84 and stand deviation of 0.416.

The findings also indicated that 15.4% strongly agreed that there was procedures for timely liquidation of collateral. It was further, established that 16.0% agreed while 27.6% were undecided. 38.5% disagreed while 2.5% strongly disagreed. As indicated by the high percentage 38.5%, majority of respondents disagreed that there was procedures for timely liquidation of collateral with a mean of 4.83 and standard deviation of 0.395.

The study findings also revealed that the Sacco's monitor the borrower's principal and interest repayments account activity. It was realized, as seen in table 4.1, that 30.2% strongly agreed, 19.1% agreed, 20.7% were undecided, 20.0% disagreed and 10.0% strongly disagreed. As indicated by 30% of the respondents disagreed that the Sacco's monitor the borrower's principal and interest repayments, account activity with a mean of 4.80 and standard deviation of 0.419.

The respondents were further, asked whether there was loan defaulters' follow-up mechanism in place. It was established, as seen in table 4.1, that 20.9% strongly agreed, 22.1% agreed, 25% were undecided, 19.5% disagreed and 3.5% strongly disagreed. As indicated by the results, it was concluded that 23% of the respondents disagreed that there was loan defaulters' follow-up mechanism in place with a mean of 4.68 and standard deviation of 0.468.

Additionally, the findings showed that 25.7% strongly agreed that the loan recovery agencies (auctioneers) are used to recover the bad debts. It was further, revealed that 20% agreed while 16.2% undecided and 29.10% disagreed and 7.0% strongly disagreed. Therefore, 36.1% of the respondents disagreed that loan recovery agencies (auctioneers) are used to recover the bad debts with a mean of 4.47 and standard deviation of 0.670.

The study sought also to establish whether the internal controls are applied in an overlapping manner to reduce risks. As illustrated in in table 4.1, the respondents' responses were as follows: 20.9%, strongly agreed, 21.8% agreed, 24.2% were undecided, 26.10% disagreed and 7% strongly disagreed. Therefore, 33.1% respondents generally disagreed and 24.2% were undecided on whether the Sacco internal controls are generally, applied in an overlapping manner to reduce risks with a mean of 4.06 and standard deviation of 0.724.

The respondents were asked to state their observation on whether the Credit officers on a regular basis report on the Sacco's compliance with all of its outstanding agreements. As tabulated in table 4.1, the findings indicated that 8.6% strongly agreed, 18.5% agreed, 31.5% were undecided, while 37% disagreed and 4.3 %strongly disagreed. Therefore, majority of the respondents 41.3% disagreed while 27.10% agreed that the credit officers on a regular basis report on the Sacco's compliance with all of its outstanding agreements with a mean of 2.90 and standard deviation of 0.470.

These findings confirmed by previous studies. Policy, (2016) stated that a Debt Collection policy sets out a clear, equitable, accountable and transparent techniques that will be followed for debt management and collection practices. To reduce the risk of non-payment of debt, a structured collection and recovery process applied. Another study by Antony & Otuya, (2019) researched on Loan Collection Policies and Financial

Performance of Savings and Credit Cooperatives in Kakamega County, Kenya. The study findings showed a positive correlation between Loan Collection Policies and financial performance.

4.1.2. Profitability

The dependent variable of this study was profitability of deposit taking Sacco's in Western region, Kenya. To achieve this respondent were asked to give their opinions on how they agree or disagree with the statements in Linkert scale of 1-5, where 1= Strongly Disagree, 2= Disagree, 3= not sure, 4= Agree, 5= Strongly Agree. The findings for this objective were tabulated in **Error! Reference source not found.**2.

Table 4.2: Profitability

S/N	Profitability indicators	5	4	3	2	1	Mean	S.D
1.	An effective loan follow up mechanism reduces total liabilities	15.6%	35.4%	15%	28.0%	6.0%	4.80	.404
2.	A well-defined risk tolerance and exposure leads to better performance of Sacco's loan book.	19.1%	23.9%	12.0%	34.0%	9.0%	4.74	.440
3.	Use of guarantors and collateral ensures maximum return on shareholders' equity.	24.7%	35.3%	5.0%	28.0%	3.0%	4.75	.436
4.	Loan recovery agencies increases the net income	19.2%	35.8%	9.0%	29.3%	4.7%	4.77	.421
5.	Effective credit risk mitigation strategies leads to an increase in asset base of Sacco's.	32.7%	49.3%	6.5%	10.1%	1.4%	4.83	.379
6.	A less diverse portfolio causes Over-dependence on one portfolio product thus affecting profitability	21.0%	23.0%	4.0%	43.5%	8.5%	4.71	.455
	Average						**4.77**	**0.42**

Source: (Field Research data 2022)

The respondents were asked to state whether effective credit risk mitigation strategies leads to an increase in asset base of Sacco's. As tabulated in table 4.**Error! Reference source not found.**2. 1.4% strongly disagreed, 10.1% disagreed, 6.5% were undecided, 49.3% agreed and 32.7% strongly agreed. Therefore, majority 82% of the respondents generally agreed and 11.5% disagreed that effective credit risk mitigation strategies leads to an increase in asset base of Sacco's. This was highly rated with a mean of 4.83an d 0.379 standard deviation.

The study sought to investigate whether an effective loan follow up mechanism reduces total liabilities. It was realized, as seen in **Error! Reference source not found.**2, that 6.0% strongly disagreed, 28.0% disagreed, 15.0% were undecided, 35.4% agreed and 15.6% strongly agreed. 34% of respondents disagreed while 51% agreed that effective loan follow up mechanism reduces total liabilities, 15% were undecided and 34% disagreed. This was rated at a mean of 4.80 and 0.404 standard deviation.

The study sought to establish whether loan recovery agencies increases the net income. As illustrated in **Error! Reference source not found.**2, that 4.7% strongly disagreed, 29.3% disagreed, 9.0% were undecided, 35.8% agreed and 19.2% strongly agreed. Therefore, a majority of respondents 55% generally agreed while 45% disagreed while 9% were undecided that loan recovery agencies increases the net income. This was rated at a mean of 4.77 and 0.421 standard deviation.

The also sought to establish whether use of guarantors and collateral ensures maximum return on shareholders' equity. It was found that, as seen table 4.2, 3% strongly disagreed, 28.0% disagreed, 5.0% was undecided, 35.3% agreed and 24.7% strongly agreed. Generally, it was noted that 31% of respondents disagreed and 60% agreed that use of guarantors and collateral ensures maximum return on shareholders' equity, while 5% were undecided. This was rated at 4.75 mean and 0.436 standard deviation.

The study wanted to establish whether a well-defined risk tolerance and exposure leads to better performance of Sacco's loan book. It was established, as seen **Error! Reference source not found.**2, that 9% strongly disagreed, 34% disagreed, 12% were undecided, 23.9% agreed and 19.1% strongly agreed. As indicated a total of 45% of respondents disagreed and that a well-defined risk tolerance and exposure leads to better performance of Sacco's loan book, 12% were undecided and 43% agreed with a mean of 4.74 and 0.440 standard deviation.

The study also sought to investigate whether a less diverse portfolio causes Over-dependence on one portfolio product thus affecting profitability. It was realized, as seen table 4.**Error! Reference source not found.**2, that 8.5% strongly disagreed, 43.5% disagreed, 4% were undecided, 23% agreed and 21.0% strongly agreed. Majority of respondents 52% disagreed while 44% agreed that less diverse portfolio causes over-

dependence on one portfolio product thus affecting profitability. This was rated at 4.71 mean and 0.455 standard deviation.

4.2. Inferential Analysis

This section presents inferential analyses, findings and discussions. Testing of the hypotheses discussed as well. From statistical analysis, when the significance level is below $p<0.05$, null hypothesis rejected and accept the alternative hypothesis.

4.2.1 Simple regression analysis.

4.2.2 *Debt collection technique has no statistically significant effect on profitability of Deposit-taking Saccos in Western Region, Kenya.*

The purpose of this hypothesis was to find out the relationship between debt collection techniques and profitability of deposit taking Saccos. The hypothesis of the study that posits, H_02: debt collection technique has no statistical significant effect on profitability of deposit taking Saccos. The outcome was tested using significance of R square and Regression coefficient at 95.0% confidence level. The results presented in Table 4.3

Table 4.3: Regression Results of debt collection techniques on profitability of deposit taking Saccos

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			
						F Change	df1	df2	Sig. F Change
1	.591	.350	.346	.81454	.350	86.050	1	160	.000

a.   Predictors: (Constant), X1

ANOVAᵃ

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	57.092	1	57.092	86.050	.000
	Residual	106.156	160	.663		
	Total	163.247	161			

a. Dependent Variable: Profitability
b. Predictors: (Constant), X2

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.154	.064		2.412	.017	.028	.281
	X1	.606	.065	.591	9.276	.000	.477	.734

a. Dependent Variable: Profitability
Source: (Field Research data 2022)

Table 4.3 reveals a positive and significant relationship between debt collection techniques on profitability of deposit taking Saccos. The correlation coefficient (R) of 0.591 implied a strong positive relationship between debt collection technique and profitability. The coefficient of determination, R-square of 0.350 implied that debt collection techniques explains 35% of the variance in profitability in Saccos in western region, Kenya. At 5% level of significance and 95% level of confidence

The ANOVA results show that F=86.050, α=0.000 which is less that p-value of 0.05. The results reveal that the overall regression model was significant in determining the applicability of the model to measure the study variables. Hence there is a satisfactory goodness of fit between debt collection techniques and profitability. The use of regression model to either accept or reject the research hypothesis is thus justified.

The regression equation to estimate the degree of profitability stated as:

Y = 0.154+ 0.606X₁+e

From the regression equation, when debt collection technique changes by 0.606, profitability changes by 0.154. Thus, debt collection techniques has a positive relationship with profitability. Where Y= profitability, X₁=debt collection techniques and e=error of term.

The results also show that debt collection techniques is statistically significant (α=0.000 and p-value=0.05 thus α<p-value) in explaining profitability in deposit taking SACCOs.

The results of the regression in Table 4.3 used regression coefficient to test the first research hypothesis, Ho1 stated that, Debt collection techniques has no significant effect on profitability deposit taking Saccos in western region, Kenya. The null hypothesis of the study was therefore rejected at 0.05 significant level since the beta value was not equal to (β≠0, 0.591≠0) hence the study concluded that there is positive significant regression between debt collection techniques profitability of deposit taking Saccos in western region, Kenya.

The findings concur with those of Antony & Otuya, (2019) on Loan Collection Policies and Financial Performance of Savings and Credit Cooperatives in Kakamega County, Kenya. The study findings showed a positive correlation between Loan Collection Policies and financial performance.

V. Summary Of Findings, Conclusions And Recommendation

5.1 Summary of Findings

This section presents the summary of key findings of the study. The purpose of this study was to examine the effects of debt collection techniques, credit qualification terms, credit risk mapping and government policy on profitability among Saccos in Western Region, Kenya.

There is evidence that there is a strong linear relationship between debt collection technique and profitability as indicated by correlation coefficient (R) of 0.591. This implied that debt collection has a significant and strong relationship with profitability. The coefficient of determination, R-square of 0.350 implied that debt collection technique explains 35% of the variance in profitability in Saccos in western region, Kenya. The significance value is 0.000, which is, less than 0.05 thus the model was statistically significant in predicting the effect of debt collection technique and profitability in Saccos in western region, Kenya.

An F-significance value of $p = 0.000$ indicated that there was a probability of 0.00% from the regression model to accept the null hypothesis. The first research hypothesis posited that H_01: Debt collection technique has no significant effect on profitability. Thus, the model was significant and therefore the null hypothesis rejected on the ground that debt collection techniques had a significant and strong positive correlation with profitability in Saccos in western region, Kenya.

5.3 Conclusion

The study concluded that there was a positive significant effect between debt collection techniques and profitability among DT-Saccos in western region

5.4 Recommendations of the Study

Based on the findings of the study, the researcher recommended the following;

i. The study recommends that Saccos should strengthen debt collection strategies to minimize debt writing off. In ensuring strong debt collection mechanisms will have a positive influence of the Sacco's increase in net income.

ii. The study recommends adoption of International regulations guidelines to strengthen the Sacco operations.

5.5 Area for Further Research

Based on the research gaps identified, the study recommended that:

i. Further, carry out the research on credit risk mitigations strategies on profitability on other Saccos not in western region to compare with the findings of this study.

ii. Related studies should be conducted regional countrywide on Saccos. In addition, a similar study be conducted but focus on organizational performance of the other Saccos not deposit taking in Kenya.

iii. Since the R square, was not 100%, it seems other factors were not addressed by the study. The study also recommends that a study seeking to establish influence of other variables on credit-risk mitigation strategies on profitability of deposit taking Sacco's. These other variables may encompass free cash flows, ownership structure, risk, financial distress, liquidity, stiff competition, growth opportunities.

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