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INFLUENCE OF RISK REDUCTION STRATEGY ON GROWTH OF SAVINGS AND CREDIT COOPERATIVES SOCIETIES IN MACHAKOS COUNTY, KENYA

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Abstract

Savings and Credit Co-operatives Societies (SACCOs) engage in the safeguarding of funds and valuables for their members, in addition to providing loans and investment financial services. However, this endeavor entails significant risks for both the lender and the borrower. These risks decrease the Savings and Credit Co-operatives Societies ability to meet their obligations, decreases their profitability and at times leads to collapse. However, despite the adoption of various risk management strategies, the growth of Savings and Credit Co-operatives Societies still remains low. Therefore, the study sought to examine the effect of risk reduction on the growth of Savings and Credit Co-operatives Societies in Machakos County, Kenya. The study was anchored on modern portfolio theory. This study adopted a descriptive survey research design and correlational research design. The target population was 56 heads of finance departments working in SACCOs in Machakos County. The study used census approach and hence included all the heads of finance departments working in SACCOs in Machakos County. The study used primary data, which was collected by use of self-administered questionnaire. Content analysis was used to analyze qualitative data and the results were presented in a narrative form. Descriptive and inferential statistics were used in analyzing quantitative data with the help of the SPSS version 25 statistical software. Quantitative results were presented in tables and figures. The study enhances Modern Portfolio Theory by demonstrating its applicability to SACCOs, showing that risk reduction strategies are crucial for their growth. It also provides SACCOs with practical guidance on adopting risk management practices that drive growth, emphasizing the benefits of diversification and risk assessment. The study further informs policymakers about the importance of regulatory support for risk reduction strategies, advocating for policies that promote diversification and effective risk management to foster SACCO stability and growth.

Keywords: *Risk Reduction Strategy, Risk Exposure, Liquidity Risk, Growth*

INTRODUCTION

The cooperative movement emerged in Europe during the early 19th century with the aim of shielding workers and small-scale farmers from exploitation by their employers. The first Co-operative Society in the world was established in 1844 in Rochdale, a small village in England, by the Rochdale Pioneers (Paudel & Khanal, 2020). Since its inception, the cooperative movement has undergone significant growth, with approximately 1 in 7 people worldwide now

affiliated with a cooperative organization. Cooperatives have proven to be effective tools for national development and poverty alleviation, largely due to their ability to engage with grassroots communities and individual households (Sushmitha & Nagaraja, 2019). Risk management practices are crucial for SACCOs as they ensure financial stability, enhance operational efficiency, and build member confidence (Choudhury, Jones & Opare-Addo, 2022). Effective risk management mitigates financial and operational risks, fosters compliance with regulations, and supports strategic decision-making.

Risk reduction strategies involve measures and practices implemented by organizations to minimize potential losses and uncertainties that could impact their operations and financial stability. (Huizinga & Demirgue, 2019) For Savings and Credit Co-operatives Societies (SACCOs), these strategies are crucial as they help mitigate risks associated with lending, investment, and operational activities. Effective risk reduction enhances the financial stability of SACCOs, ensuring they can meet their obligations, maintain profitability, and foster member trust (Sushmitha & Nagaraja, 2019). By implementing robust risk management practices, SACCOs can better manage uncertainties, prevent defaults, and safeguard their assets, thereby supporting sustainable growth and improved performance. This, in turn, contributes to the overall stability and reliability of the financial cooperative sector.

Across various regions, Savings and Credit Cooperatives (SACCOs) have demonstrated poor performance and occasional collapse, highlighting the critical need for effective risk reduction strategies. In India, SACCOs struggle with low growth due to inadequate risk management, impacting membership and financial stability (Sushmitha & Nagaraja, 2019). Similarly, the collapse of cooperatives in Nepal and Bangladesh underscores the importance of credit risk management and financial controls to prevent defaults and ensure stability (Gyanendra, 2022; Ligon, 2018). In Africa, including South Africa and Nigeria, the performance issues of cooperatives reveal the necessity for strategic risk planning and operational controls (Machethe, 2019; Danjumam, 2018). In Kenya, SACCOs face challenges such as high non-performing loans and declining membership, indicating that robust risk reduction strategies are essential for improving their financial stability and growth potential (Kariuki & Mutugi, 2019; Kibui & Moronge, 2023).

Statement of the Problem

The Kenyan SACCO subsector persists in operating with inadequate accounting mechanisms, thereby endangering billions of customer savings (Kiunyu, 2017). SACCOs are exposed to risks such as credit, operational, and liquidity risks, which severely impacts their growth and financial stability. In response, SACCOs adopt risk reduction strategy to improve performance. According to Omiagbo (2021), effective risk reduction strategy enhances SACCO performance by mitigating potential financial losses and operational disruptions. They ensure better decision-making, protect assets, and maintain member confidence (Ondu, 2020). Conversely, poor risk reduction strategies can lead to increased losses, operational inefficiencies, and reduced financial stability.

Non-performing loans ratio increased from 6.15% in 2019, to 8.39% in 2020, 8.86% in 2021, 9.60% in 2022 and 12.8% in 2023. SASRA has pegged a ratio of 5% as the maximum loan default ratio among SACCOs, which implies that NPL ratio is higher than SASRA recommended ratio (SASRA, 2023). In Machakos County, the number of members in SACCOs decreased by 12% between 2019 to 2020, which later increased by 9.5% in 2021, increased by 15.5% in 2022 and by 21.2% in 2023. Further, the profitability of SACCOs in Machakos County in terms of return on assets declined from 21.5% in 2019 to 14.5% in 2020, which increased to 19.6% in

2021, decreased to 17.5% in 2022 and 15.5% in 2023 (Machakos County SACCOs, 2023). According to Mbatha and Muhoho (2020), most of the SACCOs in Machakos County have been experiencing challenges in the utilization of risk reduction. SACCOs in Machakos County struggle with identifying, assessing, and mitigating risks adequately. Insufficient risk reduction measures can expose the SACCO to financial losses, reputational damage, and regulatory non-compliance (SASRA, 2023).

Several studies have been undertaken in Kenya to explore the relationship between risk reduction strategy and the growth of SACCOs. For instance, Muchiri (2021) investigated the relationship between risk reduction practices and the financial competitiveness of Savings and Credit Co-operative Societies (SACCOs) in Kirinyaga County; and Ebole and Paul (2021) assessed the effect of risk reduction strategy on infrastructure project performance in Kiambu County. Contextually, Muchiri (2021) study was limited to SACCOs in Kirinyaga County while Ebole and Paul (2021) study was limited to infrastructure projects in Kiambu County. Methodologically, both Muchiri (2021) and Ebole and Paul (2021) utilized a descriptive research design. The study sought to assess the influence of risk reduction strategy on growth of savings and credit cooperatives societies in Machakos County, Kenya

LITERATURE REVIEW

Theoretical Framework

The study was anchored on Modern Portfolio Theory (MPT), which was developed by Harry Markowitz in 1952 (Markowitz, 1952). The theory revolutionized investment strategy by proposing that investors can optimize their portfolios by balancing risk and return through diversification. MPT suggests that by carefully selecting a combination of different assets, investors can construct a portfolio that maximizes expected return for a given level of risk or minimizes risk for a given level of expected return (Mohamud & Nasieku, 2019). The theory emphasizes that the risk of an individual asset should not be considered in isolation, but rather in the context of how it contributes to the overall risk of the portfolio.

Modern Portfolio Theory (MPT) operates on several key assumptions. It assumes that investors are rational and risk-averse, seeking to maximize returns for a given level of risk (Mohd & Ayad, 2019). Investors are also expected to have access to complete and accurate information, allowing them to make informed decisions. MPT assumes that returns of assets follow a normal distribution and that investors can quantify risk through the standard deviation of returns. Further, it presumes that markets are efficient, meaning that asset prices fully reflect all available information, and that investors can create a portfolio with no transaction costs or taxes. In addition, it assumes that investors can borrow and lend at a risk-free rate and can diversify their portfolios to mitigate risk.

Modern Portfolio Theory (MPT) explains that risk reduction can significantly impact the growth of Savings and Credit Co-operative Societies (SACCOs) in Machakos County, Kenya, by emphasizing diversification and risk-return optimization. By diversifying investments and lending portfolios across various sectors and borrower profiles, SACCOs can mitigate overall risk and stabilize returns. MPT's efficient frontier concept guides SACCOs in selecting optimal investment opportunities that offer the best return for a given level of risk, enhancing profitability and growth. Additionally, robust risk management practices, such as setting exposure limits and conducting risk assessments, further support SACCOs' financial stability and expansion.

While MPT has its merits and has been influential in portfolio management, it is not without criticism. MPT assumes that investors are rational and make decisions solely based on expected

returns and risk. Critics argue that this assumption oversimplifies human behavior and fails to account for cognitive biases, emotional factors, and market inefficiencies that can impact investment decisions (Mohamud & Nasieku, 2019). MPT heavily relies on historical data for estimating expected returns, variances, and correlations of assets. Critics argue that historical data may not accurately reflect future market conditions, especially during periods of economic uncertainty or structural changes.

Empirical Review

Sarmah (2021) investigated the impact of risk reduction on firm performance within the Indian electronics industry, aiming to assess how strategies to mitigate risks influence organizational outcomes. The study focused on understanding the relationship between risk reduction practices and various performance metrics in electronics firms operating in India. The study adopted mixed-methods approach. The study collected quantitative data through structured surveys distributed to managers and executives across 50 electronics firms, and qualitative data through in-depth interviews with key stakeholders in these companies. The study found that risk reduction strategies significantly improved firm performance, particularly in enhancing operational efficiency and profitability. Firms that adopted comprehensive risk management practices experienced better financial results and competitive advantage.

Atiso, Koranteng, and Boakye (2020) explored the effects of risk reduction practices on the financial performance of rural banks in Ghana, focusing specifically on Akuapem Rural Bank. The study aimed to assess how various risk reduction strategies impact financial metrics such as profitability, asset quality, and overall financial stability within rural banking institutions. The researchers employed a case study approach, concentrating on Akuapem Rural Bank as a representative example of rural banks in Ghana. Data were collected through a combination of quantitative surveys and qualitative interviews. Questionnaires were distributed to 40 bank managers and financial officers, and qualitative insights were gathered through in-depth interviews with key personnel involved in risk management. The study revealed that effective risk reduction practices positively influenced the financial performance of Akuapem Rural Bank. Specifically, the implementation of robust credit risk management and liquidity controls were found to enhance profitability and reduce non-performing loans.

In Nyamira County, Nyakundi (2017) investigated the impact of risk management strategies on the performance of youth projects. One of the objectives of the study was to ascertain the relationship between risk reduction strategy and project performance, as well as the relationship between risk retention strategy and project performance in Nyamira County. The researcher utilized a descriptive research survey design to investigate the correlations between risk management strategies and project performance within the county. Questionnaires were distributed to project managers, monitoring and evaluation officers, as well as pertinent government officials and representatives from donor agencies funding youth projects in Nyamira County. The findings revealed a noteworthy impact of risk reduction strategy on the performance of youth projects in the region.

Ondu (2020) investigated risk management strategies and the performance of SACCOs in Nakuru County, Kenya. One of the study's objectives was to assess the impact of risk reduction on the performance of SACCOs in Nakuru County. The research design employed was descriptive survey. The target population consisted of 165 credit, finance, and management staff working within SACCOs in Nakuru County. Using a simple random sampling method, 63 respondents were selected from the target population for the study. Questionnaires were utilized as the data collection instrument. The findings indicated a

positive relationship between risk reduction and the performance of SACCOs. Additionally, it was noted that most SACCOs in Nakuru County conduct regular inspections to minimize the occurrence of risks within their operations.

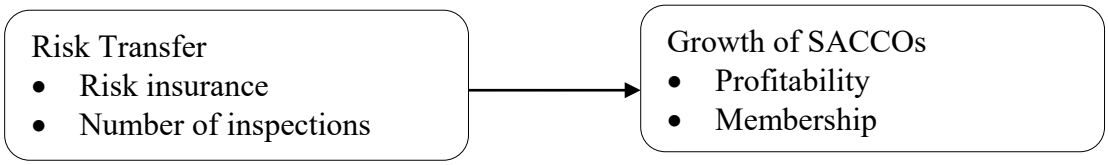
Nabukaki and Omwenga (2022) investigated the impact of risk management strategies on the financial performance of Jomo Kenyatta International Airport. The study aimed to assess the effect of risk reduction strategy on the financial performance of JKIA. Employing a descriptive research design, the target population consisted of 400 respondents from various departments and staff levels at JKIA, including senior managers to junior staff. The study found that risk reduction strategy, as measured by corporate governance and Standard Operating Procedures (SOPs), Audits and inspection, and Risk automation, significantly and positively influenced the financial performance of Jomo Kenyatta International Airport.

Ebole and Paul (2021) undertook a study in Kiambu County to assess the impact of risk reduction strategy on infrastructure project performance. Employing a descriptive design, the study aimed to provide a systematic and precise description of responses, ensuring accuracy, validity, and reliability. The target population included 484 respondents from infrastructure companies in Kiambu County. The findings revealed a noteworthy and positive correlation between risk reduction strategies and the performance of infrastructure projects in the county.

Muchiri (2021) investigated the relationship between risk reduction practices and the financial competitiveness of Savings and Credit Co-operative Societies (SACCOs) in Kirinyaga County, Kenya. Employing a descriptive research design, the study aimed to assess the subject under investigation. A census approach was used to gather data from all 23 SACCOs operating in Kirinyaga County. Primary data was collected from the top management of these SACCOs through the distribution of questionnaires. The findings of the study revealed a significant and positive correlation between risk reduction practices and the financial competitiveness of SACCOs in Kirinyaga County.

Conceptual Framework

The conceptual framework in Figure 1 shows the relationship between the independent variable and dependent variable. Sacco's growth depends on the appropriate risk management practices, like risk reduction. Therefore, the independent variable was risk reduction and the dependent variable was growth of SACCOs.



Independent Variable **Dependent Variable**

Figure 1: Conceptual Framework

RESEARCH METHODOLOGY

The study adopted a descriptive research design and correlational research design. The unit of analysis was all the SACCOs operating within Machakos County. As per the SACCO Societies Regulatory Authority (2023), there are a total of 56 SACCOs in Machakos County. The unit of observation in this study was heads of finance departments in SACCOs operating within Machakos County. The target population of this study was 56 heads of finance departments employed in SACCOs across Machakos County. The research adopted a census approach, encompassing all heads of finance departments employed in SACCOs within Machakos County.

A semi-structured questionnaire was used to gather primary data from the participants. This type of questionnaire combines both structured and unstructured questions. To assess the validity and reliability of the research instrument a pilot study was conducted among SACCOs that did not have their headquarters in Machakos County but only had branches there. The pilot group comprised of 10 percent of the sample size (6). To enhance face validity in this study, reviews from experts in the field of strategic management, including the supervisor, were utilized. Content validity was enhanced by organizing the questionnaire's questions according to the study's indicators and objectives. The reliability of the research instrument was assessed using internal consistency, which is measured using Cronbach's alpha. All the independent variables and the dependent variable had a Cronbach's alpha of above 0.7, which was considered acceptable.

The research instruments collected both quantitative and qualitative data. Qualitative data from open-ended questions was analyzed using content analysis, with results presented narratively. Quantitative data was analyzed using descriptive and inferential statistics, with the help of a statistical software known as Statistical Package for Social Sciences (SPSS version 25). Descriptive statistics were used to analyze preliminary respondent information and to describe responses related to independent and dependent variables. Descriptive statistics such as frequency distribution, percentages, mean, mode, and standard deviation were utilized in this study. Inferential statistics included Pearson correlation coefficient and linear regression analysis. The regression model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where: Y = Growth of SACCOs; β_0 = Constant; β_1 = Coefficients of determination; X_1 = Risk Reduction; ε= the error term.

RESULTS AND DISCUSSIONS

The target population was 56 heads of finance departments working in SACCOs in Machakos County. Out of the 56 questionnaires distributed, 50 were completed and collected by the researcher, resulting in a response rate of 89.29%. According to Krishna (2020), a response rate of 75 percent is considered sufficient for data analysis, drawing conclusions, and making recommendations. Therefore, the 89.29% response rate achieved in this study was deemed adequate for data analysis.

Risk Reduction and Growth of SACCOs

The respondents were asked to detail how risk reduction practices impact the growth of their SACCOs, focusing on various strategies implemented to mitigate risks. They were asked to rate the degree of influence these practices have on their SACCOs' performance. The results of this evaluation are illustrated in Figure 2.

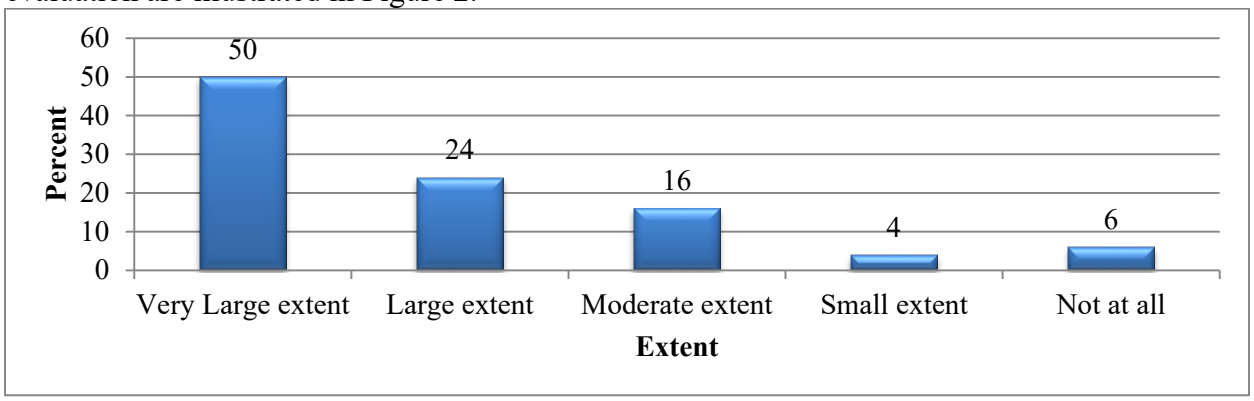


Figure 2: Extent of Risk Reduction Effects on Growth of SACCO

From the findings, 50% of the respondents indicated that risk reduction affects growth of their SACCOs to a very large extent, 24% indicates to a large extent, 16% indicated to a moderate extent, 6% indicate to no extent at all and 4% indicate to a small extent. The findings suggest that risk reduction significantly impacts SACCO growth, with half of the respondents noting a very large extent of influence. This indicates that risk reduction strategies are critical to the growth and success of SACCOs. A substantial portion of respondents also acknowledged a large extent of impact, reinforcing the importance of these practices.

The participants were requested to express their level of agreement with different statements regarding risk reduction and the growth of SACCOs. The outcomes are presented in Table 1.

Table 1: Aspects of Risk Reduction Strategy

	Mean	Std. Deviation
The loans given by our SACCO must be fully secured in order to enable the SACCO to reduce occurrence of risks	4.840	.467
The SACCO regulates loan limits considering customers repayment capability	4.600	.494
The SACCO frequently changes risk reduction procedures in order to help reduce risk	4.040	1.009

The participants strongly concurred with the statement suggesting that their SACCOs mandate fully secured loans to diminish the risk occurrence, as evidenced by a mean of 4.840 (SD=0.467). Additionally, they strongly agreed with the statement indicating that SACCOs adjust loan limits based on customers' repayment capacity, demonstrated by a mean of 4.600 (SD=0.494). Moreover, the respondents agreed with the statement implying that SACCOs frequently update risk reduction protocols to mitigate risks, with a mean of 4.040 (SD=1.009).

Growth of SACCOs

The respondents were asked to specify the extent of their SACCOs' overall growth over the past two years. This growth assessment covered various dimensions such as financial performance, membership expansion, and operational development. The results of this evaluation are illustrated in Figure 3, providing a detailed overview of growth trends and patterns observed within the SACCOs.

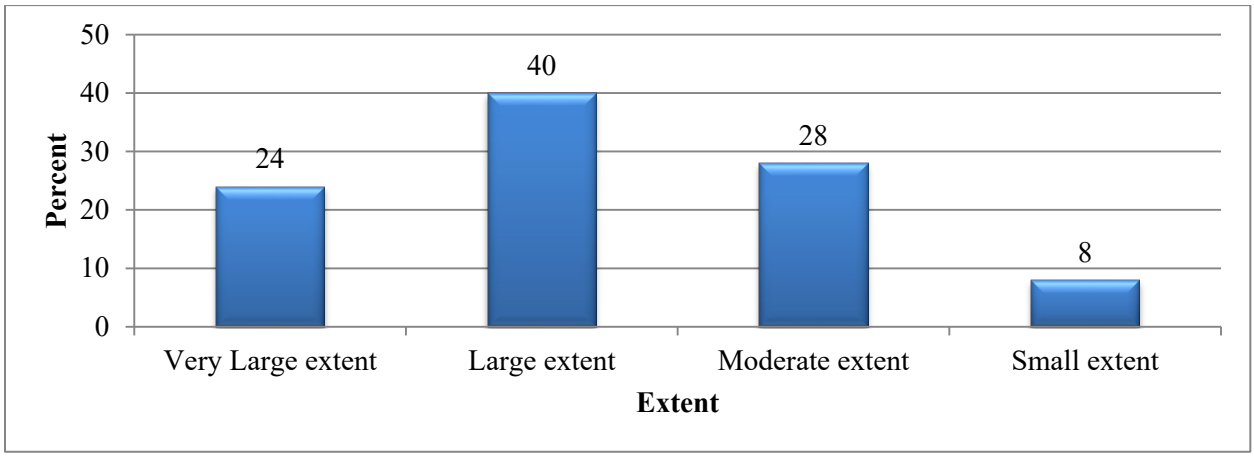


Figure 3: Extent of SACCOs Growth in the Last Two Years

According to the results, 40% of the respondents reported a significant improvement in the overall growth of their SACCOs over the past two years, while 24% reported a very large extent of improvement. Additionally, 28% indicated a moderate extent of growth, and 8% indicated a

small extent. This disparity underscores the need for targeted strategies to support SACCOs struggling with slower growth and to ensure consistent development across the sector.

The respondents were also requested to express their level of agreement with several statements regarding risk retention and the growth of SACCOs. The outcomes are presented in Table 2.

Table 2: Risk Retention and Growth of SACCOs

Statements	Mean	Std. Deviation
Risk management strategies by the SACCO has led to high SACCO profitability	4.360	.631
The SACCO risk management strategies enhance satisfaction of our customers.	4.440	.704
The SACCO risk strategy has enabled members to take bigger loans.	4.080	1.046
Good risk management strategy enhances loan growth and performance	4.34	.872

Based on the findings presented in Table 2, respondents concurred with several statements regarding risk retention and the growth of SACCOs. They indicated agreement with the notion that SACCOs' risk management strategies enhance customer satisfaction, as evidenced by a mean score of 4.440 (SD=0.704). Moreover, they agreed that these strategies have contributed to high SACCO profitability, with a mean score of 4.360 (SD=0.631). Additionally, respondents expressed agreement with the idea that effective risk management strategies improve loan growth and performance, as indicated by a mean score of 4.34 (SD=0.872). Furthermore, they agreed that SACCOs' risk strategies have enabled members to access larger loans, with a mean score of 4.080 (SD=1.046).

The participants were requested to specify the number of members their respective SACCOs had between the years 2018 and 2022. The outcomes of this inquiry are displayed in Table 3.

Table 3: Number of Members in SACCOs in the Last Five Years

Year	N	Minimum	Maximum	Mean	Std. Deviation
2018	50	39	61865	7366	15322.851
2019	50	40	66400	8348	16736.821
2020	50	38	25000	5103	8434.657
2021	50	33	57946	8517	15538.535
2022	50	30	60357	10097	17850.096

From the findings, the average number of members in the SACCOs in Machakos County in 2018 was 7,366, which increased to 8,348 in 2019, decreased to 5,103 in the year 2020. However, the average number of members increased to 8,517 in the year 2021 and 10,097 in the year 2022. The findings indicate a fluctuating trend in membership numbers among SACCOs in Machakos County over the observed years. The initial increase from 2018 to 2019 suggests growth, but the sharp decline in 2020 might reflect challenges such as the impact of the COVID-19 pandemic or other disruptions. However, the subsequent rise in membership in 2021 and 2022 indicates recovery and possibly growth, suggesting that SACCOs are regaining and even surpassing previous membership levels.

Inferential Statistics

Inferential statistics, such as correlation analysis and regression analysis, were used to show the effect of risk transfer strategy, risk retention strategy, risk Avoidance strategy and risk reduction strategy on the growth of SACCOs in Machakos County.

Correlation Analysis

The Pearson product-moment correlation coefficient was employed to evaluate the degree of correlation between the independent variable (risk reduction strategy) and the dependent variable (Growth of SACCOs). The results are depicted in Table 4.

Table 4: Correlation Coefficients

		Growth of SACCOs	Risk Reduction Strategy
Growth of SACCOs	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	125	
Risk Reduction Strategy	Pearson Correlation	.662**	1
	Sig. (2-tailed)	.000	
	N	50	50

**. Correlation is significant at the 0.01 level (2-tailed).

The study found that there exists a positive and significant relationship between risk reduction strategy and growth of SACCOs in Machakos County, Kenya (r=0.662, p-value =0.000). These findings are in agreement with Nyakundi (2017) observation that risk reduction strategy had a significant effect on performance of youth projects in Nyamira County.

Regression Analysis

Linear regression analysis was conducted to explore the relationship between the independent variable (risk reduction strategy) and the dependent variable (growth of SACCOs). The model summary was used to explain the variation in the dependent variable (risk reduction strategy) that could be explained by independent variable (growth of SACCOs). The results were as presented in model summary in Table 5.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.543[a]	0.295	0.276	0.17568

a. Predictors: (Constant), Risk Reduction Strategy

As illustrated in Table 5, the adjusted R-squared value for the relationship between risk reduction strategy and the growth of SACCOs was 0.295. This indicates that 29.5% of the variance in the dependent variable (growth of SACCOs) was accounted for by the independent variables (risk reduction strategy).

ANOVA was used to evaluate whether the regression model in this study was a good fit for the research data. The results are presented in Table 6.

Table 6: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.525	1	17.525	227.106	.000[b]
	Residual	3.704	48	0.077		
	Total	21.229	49			

a. Dependent Variable: Growth of SACCOs

b. Predictors: (Constant), Risk Reduction Strategy

In this study, ANOVA was conducted to assess whether the model adequately fit the data. As indicated in Table 6, the calculated F-value was 227.106, while the critical F-value from the F-distribution table was 4.04. Since the calculated F-value exceeded the critical F-value and the p-value (0.000) was less than the significance level (0.05), the model was deemed to be a good fit for the data. Consequently, it could be utilized to predict the impact of risk reduction strategy on the growth of SACCOs in Machakos County, Kenya.

Beta weights or coefficients for every variable enable comparison of relative significance of every independent with dependent study variable. The standardized coefficients in this study were provided for various regression equations. Findings were given in Table 7.

Table 7: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.616	0.293		5.515	0.000
	Risk Reduction Strategy	0.784	0.175	0.884	4.480	0.000

a. Dependent Variable: Growth of SACCOs

Regression equation for the standardized coefficients was;

$Y = 1.616 + 0.784X_1 + \varepsilon$

The study findings indicated that risk reduction strategy has a positive and significant effect on growth of SACCOs in Machakos County, Kenya (β_1=0.884, p-value=0.000). P-value (0.000) was less than 0.05 (significant level) and hence the effect was considered to be significant. This denotes that an improvement in risk reduction strategy would lead to 0.884 improvements in growth of SACCOs in Machakos County. These findings are in agreement with Nyakundi (2017) observation that risk reduction strategy had a significant effect on performance of youth projects in Nyamira County. Also, the findings are in concurrence with Ondu (2020) observation that Risk reduction has a positive effect on performance of Saccos. The findings are in line with Nabukaki and Omwenga (2022) findings that risk reduction significantly affects the growth and sustainability of firms.

Conclusion and Recommendations

The study concludes that risk reduction strategy has a positive and significant effect on growth of SACCOs in Machakos County, Kenya. The study found that the indicators of risk reduction strategy, such as risk insurance and number of inspections, affect the growth of SACCOs. The findings imply that an improvement in the use of risk avoidance strategy in terms of risk insurance and number of inspections would lead to an improvement in the growth of SACCOs in Machakos County, Kenya. The study also established that risk reduction affects growth of their SACCOs to a large extent. The research also revealed that SACCOs prioritize fully securing loans to mitigate risks. Moreover, it was found that SACCOs adjust loan limits based on customers' repayment capacities. Additionally, SACCOs frequently update risk reduction procedures to effectively mitigate risks.

The study recommends that SACCOs have a comprehensive insurance coverage that mitigates various risks, including credit risk, operational risk, and natural disasters. They should also regularly review insurance policies to assess adequacy and make necessary adjustments based on the changing risk landscape. The study also recommends that the management of SACCOs should ensure the increase the frequency of inspections and audits from two in a year to at least four in a year to identify and mitigate potential risks promptly. They should also establish an inspection schedule that covers all critical areas of SACCO operations, including lending, financial management, and member services.

Contribution to Theory, Practice and Policy

The study's findings contribute uniquely to Modern Portfolio Theory by illustrating its relevance beyond traditional financial portfolios to Savings and Credit Co-operatives (SACCOs). It demonstrates that applying risk reduction strategies, such as diversification and risk assessment,

can significantly enhance the growth of SACCOs in Machakos County, Kenya. This expansion of the theory underscores the importance of managing risk not only in individual investments but also in organizational growth and stability, providing a theoretical framework for understanding how SACCOs can achieve sustainable development.

Practically, the study offers SACCOs actionable insights into adopting effective risk management practices to foster growth. By highlighting the positive impact of risk reduction strategies, it encourages SACCOs to implement diversified investment portfolios and robust risk assessment processes. Additionally, the study has policy implications, suggesting that policymakers should support regulatory frameworks that facilitate effective risk management in SACCOs. This could involve creating policies that promote diversification, provide risk management training, and offer financial incentives for adopting risk reduction strategies, thereby contributing to the overall stability and expansion of SACCOs.

Areas for Further Research

The primary aim of this study was to examine how risk reduction strategy influences the growth of SACCOs in Machakos County. However, it's important to note that the study solely focused on SACCOs headquartered in Machakos County, so its findings may not be applicable to SACCOs in other counties across Kenya. Consequently, future research endeavors should explore the influence of risk reduction strategy on SACCO growth in various counties within Kenya. The study revealed that the risk reduction strategy accounted for 29.5% of SACCO growth. Hence, there's a need for further investigation into other factors influencing SACCO growth specifically within Machakos County.

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