

FINANCIAL RISK MANAGEMENT AND PERFORMANCE OF SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN NAKURU EAST SUB COUNTY, KENYA

JOSIAH OTERA MOMANYI & ALEX NJIRU

Jomo Kenyatta University of Agriculture and Technology, Nakuru CBD Campus, Nakuru

ABSTRACT

Financial risk management is a priority for all managers in financial institutions. Institutions that embed the right financial risk management strategies into business planning and performance management are more likely to achieve their strategic and operational objectives. The purpose of the study was to investigate the effect financial risk management on performance of Deposit taking SACCOs in Nakuru East Sub-County. The study was specifically sought to assess the influence of financial risk identification methods, to examine the influence of financial risk assessment techniques, to assess the influence of financial risk monitoring procedures and to find out the influence of financial risk mitigation measures on financial performance of SACCOs. The study adopted a descriptive research design with the population comprising all the 15 SACCOs in which 3 employees were targeted making a total number of 45 respondents. A questionnaire with closed ended questions was used to collect primary data. Secondary data was collected from the financial reports from each SACCO for the period ranging from 2010-2014. Data was analyzed using SPSS Version 21. The study found that all the SACCOs had highly adopted financial risk management practices to manage financial risk and as a result the financial risk management practices comprising of; risk identification, risk monitoring, risk assessment and risk mitigation, had a positive correlation to the performance of SACCOs in Nakuru. The study recommends that risk management techniques should be emphasized and utilized more effectively by SACCOs in Kenya.

KEYWORDS: Risk Identification, Risk Assessment, Risk Monitoring

INTRODUCTION

In Kenya the financial sector comprises of banking industry, micro-finance institutions, capital markets, insurance companies, mutual funds and development finance institutions (CBK, 2007). SACCOs are registered and regulated under the Co-operative Societies Act; they are accorded the same treatment as producer or marketing cooperatives and to qualify for registration, they are not required to raise any capital. In addition, SACCOs are restricted in terms of where to invest their funds of deposits. Still with these restrictions, SACCOs remain the most important players in provision of financial services and have deeper and extensive outreach than any other type of financial institution (ICA,2002). They offer(s) a diversity of financial services which include loaning, members' welfare fund, risk management fund, credit facilities, savings facilities and insurance services to a large portion of the population. Though, the Kenyan financial sector has been undergoing continuous reform process since 1999 directed at improving the capacity and health of the Kenyan economy. The first major exercise was the assessment of the risk asset quality of banks by the Ministry of finance. However, this economic assessment provides the SACCOs with cash and capital; the SACCO need to strengthen themselves for future success and a way out is an entrenchment of sound risk management framework. In Kenya, the financial sector is at its infancy undergoing series of reforms because many of the SACCOS have not been able

to establish firm risk management framework prevent unfavorable events. This study seeks to examine the impact of financial risk(s) management on the performance of SACCOs in Nakuru Town.

SACCOs have adopted different financial risk management practices such as liquidity ratio management, credit scoring systems, SACCO's regulatory environment and effective general management of SACCOs. However, SACCOs may have the best financial risk management policies but may not necessarily record high profits. Although there is industry standards on what a good credit policy is and what is not, the market may be seen to regard an individual SACCO's performance when the entire financial sector has been hit by an adverse shock such as a financial crisis. Looking at the emphasis that is laid on financial risk management by SACCOs, the level of contribution of this to the profits has not been analyzed. Siba (2012) carried out a study on the relationship between financial risk management practices and financial performance of commercial banks in Kenya. The study involved the 40 commercial banks in Kenya. The conclusion was that banks had highly effective risk management practices and there was a strong relationship between the bank's performance and the efficiency of the bank's financial risk management practices. Mudiri (2003) sought to determine financial management techniques applied by commercial banks in Kenya and reported that effective risk management requires a reporting and review structure to ensure that risks are effectively identified and assessed and that appropriate controls and responses are in place. Jared (2013) in his study on the challenges facing deposit-taking savings and Credit cooperative societies' regulator compliance in Kenya found out that the various challenges facing compliance in these institutions included non separation of shares from deposits, high dependence on short-term external borrowing, lack of liquidity monitoring system, high investment in nonearning assets, inadequate ICT system, inadequate managerial competencies and political interference, poor financial management techniques among others.

STATEMENT OF THE PROBLEM

Literature on financial risk management suggests that firms with better financial risk management strategies tend to have better performance. By relating financial risk management to performance, SACCOs can have an insight into the value of financial risk management. The recent financial crisis and the failure of banking system even in the developed countries like the USA have forced the policy makers and researchers to look into the details of these failures and in doing so, financial risk has come out as one factor that need to be addressed by banks to guarantee their sustenance. Therefore a SACCO must determine what its level of financial risk is and then implement a financial risk management requirement that would cover that risk. It is on record that in the second quarter of 2008, The Kenya Union of Savings and Credit Cooperatives reported that the consequences of the global financial risk led to reduced growth savings: 7.6 per cent growth in savings in 2008 compared to 31.2 per cent in 2007. It was reported in interviews that SACCOs in Kenya have reported increase in demand for loans, but have exercised caution in responding to requests. The deposit and loan portfolio in SACCOs amounts to about 34 percent of national savings and about 24 percent of outstanding domestic credit. It is undeniable fact that member's loan demand is very high and incompatible compared with the availability of funds. This follows that SACCOs face financial risks arising from liquidity management, credit risk management, capital management and interest rates management this has been a major cause of failure of many financial cooperatives. Exposure to such risks affect not only the bottom line of these institutions, but also lead to substantial reductions in financial and other resources, severe disruptions to the flow of information and communication, loss of records among others. These manifestations in the financial institutions imply that the financial risk management systems in place are either insufficient or are ineffective.

It is not clear yet on to what extent does financial risk identification methods, financial risk analysis techniques, financial risk monitoring procedures and financial risk mitigation measures may be responsible for the current scenario in the financial sector in Kenya especially for the SACCOs. This study will seek to investigate the influence of these variables on the performance of SACCOs in Nakuru town. The present study will seek to answer the question; how do financial risk management influence performance of SACCOs.

OBJECTIVE OF THE STUDY

The main objective of this study was to establish the influence of financial risk management on financial performance of SACCOs in Kenya. The study specifically sought:

- To establish the influence of financial risk identification methods on performance of SACCOs in Nakuru east sub County.
- To assess the influence of financial risk assessment techniques on performance of SACCOs in Nakuru east sub County.
- To establish the influence of financial risk monitoring procedures on financial performance of SACCOs in Nakuru east sub County
- To find out the influence of financial risk mitigation measures on financial performance of SACCOs in Nakuru east sub County.

LITERATURE REVIEW

Financial Risk Identification Methods and Performance of SACCOs

In relation to commercial banks' practice of risk management, Al-Tamimi (2002) found that the UAE commercial banks were mainly facing credit risk. The study also found that inspection by branch managers and financial statement analysis are the main methods used in risk identification. The main techniques used in risk management are establishing standards, credit score, credit worthiness analysis, risk rating and collateral. A recent study by Al-Tamimi and Al-Mazrooei (2007) was conducted on banks' risk management of UAE national and foreign banks. Their findings reveal that the three most important types of risks encountered by UAE commercial banks are foreign exchange risk, followed by credit risk, then operating risk. Risk identification is positively significant to influence risk management practices. In the case of banks, studies made especially on risk identification and risk mitigation includes the work of Haron and Hin Hock (2007) on market and credit risk, and Haron (2007) specifically on operational risk. Haron and Hin Hock (2007) explain the inherent risk; credit and market risk exposures in Banks. Also, they illustrate the notion of displaced commercial risk that is important in Banks. They conclude that certain risks may be considered as being inherent in the operations of conventional banks. Although the risk exposures of Banks differ and may be complex than conventional financial institution, the principles of credit and market risk management are applicable to both. In addition, the IFSB's standards on capital adequacy and risk management guiding principles mark the first steps in an ongoing process of developing prudential standards and filling regulatory gaps in the field of finance. Griffin et al (2009) investigated the risk management techniques of twenty eight Islamic banks by examining the perception of senior Islamic banker toward risk. The result revealed that, Islamic banks are typically exposed to the same types of risk in conventional banks with different levels of the risks. Jansson and Norrman (2004) define risk management process as focusing on understanding the risks, and

minimizing their impact. Kuusela and Ollikainen (1998) describe the risk management process as Risk identification, measurement and analyzing, controlling and finance, evaluation and cost calculations

Financial Risk Assessment and Performance of SACCOs

There are many conceptual studies made on risk analysis and assessment by reference to measurement and mitigation of risk. In practice, it is useful to classify the different risks according to the amount of damage they possibly cause (Fuser et al, 1999). This classification enables the management to divide risks that are threatening the existence of the corporation from those which can cause slight damages. Frequently, there is an inverse relationship between the expected amount of loss and its corresponding likelihood, that is; risks that will cause a high damage to corporation, like earthquakes or fire, occur seldom, while risks that occur daily, like interest rate risks or foreign exchange risks, often cause only relatively minor losses, although these risks can sometimes harm the corporations seriously. Strutt (1993c) gives the fullest definition of risk analysis in a third paper where he sets out the concept in seven stages as systematic assessment, identification of risks, assessment of risks. Risk analysis now goes beyond evaluation to include some of the decision making processes of risk management. Brainstorming is the main intuitive technique, involving a group generating ideas off the top of their heads with a philosophy of nobody is wrong - let's get the ideas on the board. Although quick and simple, it lacks the comprehensive approaches of the more sophisticated techniques. A comprehensive risk measurement and mitigation methods for various risk arising from financing activities and from the nature of profit and loss sharing in the source of funds especially investment account holders are explained by Sundararajan (2007). He concludes that the application of modern approaches to risk measurement, particularly for credit and overall banking risks is important for banks. Also, he suggests that the need to adopt new measurement approaches is particularly critical for banks because of the role play, the unique mix of risks in finance contracts. Olomola (2002) found that 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.

Financial Risk Monitoring and Mitigation and Performance of SACCOs

The main function of the risk manager is to monitor; measure and control credit risk. Effective risk management requires a reporting and review structure to ensure that risks are effectively identified and assessed and that appropriate controls and responses are in place. Risk monitoring can be used to make sure that risk management practices are in line and proper risk monitoring also helps bank management to discover mistake at early stage (Al-Tamimi and Al-Mazrooei, 2007). Monitoring is the last step in the corporate risk management process (Pausenberger and Nassauer, 2002). Khan and Ahmad (2001) conducted a survey of risk management practices 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%. Al-Tamimi and Al-Mazrooei (2007) found that there is significant difference between UAE national and foreign banks in risk monitoring and controlling. According to Baldoni, (1998), the area of interest rate risk is the second area of major concern and on-going risk monitoring and management. Most commercial banks make a clear distinction between their trading activity and their balance sheet interest rate exposure.

Investment banks generally have viewed interest rate risk as a classic part of market risk, and have developed elaborate trading risk management systems to measure and monitor exposure. While this may be completely satisfactory for institutions that have little trading activity and work primarily on behalf of clients, the absence of adequate trading systems elsewhere in the industry is a bit distressing. While shortcomings in underwriting and management of market-related credit exposures represent important sources of losses at banks, many credit problems would have been avoided or mitigated by a strong internal credit process. For traditional bank lending, competitive pressures and the growth of loan syndication techniques create time constraints that interfere with basic due diligence. Globalization of credit markets increases the need for financial information based on sound accounting standards and timely macroeconomic and flow of funds data. When this information is not available or reliable, banks may dispense with financial and economic analysis and support credit decisions with simple indicators of credit quality, especially if they perceive a need to gain a competitive foothold in a rapidly growing foreign market.

RESEARCH METHODOLOGY

This study adopted a descriptive research design since it determines and reports the way things are and attempts to describe such things as possible behavior, attitudes, values and characteristics, (Mugenda & Mugenda, 2003). A causal study approach was employed in this research. It was used to explore the relationship between financial risk management and performance of SACCOs in Nakuru, Kenya and the empirical evidences that help answer the research objective. The study considered all 15 SACCOs registered operating in Nakuru east sub-county and targeted three employees in each SACCO. The three employees constituted; an employee in charge of credit, operations and the overall manager. This made a total of 45 respondents to whom questionnaires were administered. Both primary and secondary data were used for the study. Primary data was collected using closed ended questions covering all the objectives. For the secondary data, a succinct content analysis on financial reports of the all the SACCOs during the period 2011-2014 was analyzed. The data collected was examined before analysis commenced for completeness and consistency. The data was analyzed using descriptive statistics, correlation analysis, and panel multiple regression analysis. The panel methodology was aided by SPSS Version 20. Feasible Generalized Least Square estimation was performed after accounting for various violations of classical linear regression assumptions. Descriptive statistics was used to summarize and explain the study variables as observed in the SACCOs. The results were presented using frequencies, percentages, measures of central tendencies and dispersion displayed in tables. Inferential statistics, multiple regressions was used to test the relationship between the financial risk management and performance of SACCOs in Nakuru east sub-county.

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

The researcher sought to find out the distribution of the respondents according to their gender, age bracket, education level and working experience. The aim was to deduce any trend from the respondent's profile that was directly linked to the variables of the study. According to the findings 51.4% of respondents were female, while male constituted 48.6 percent of the respondents. The researcher further wanted to establish the working experience of the respondents. This was important since previous studies indicated positive relationship between experience of employees and employee performance which in turn would often enhance the financial performance of the targeted SACCO. From the findings 5.7% of the respondents had been in their current SACCO for less than one year, 22.9% of the respondents had been in their current SACCO for 1-3 years, 45.7% of the respondents had been in their current SACCO for a period of 4-6 years,

14.3% of the respondents had served in their current SACCO for 7-9 years and 11.4 % of the respondents had been in their current SACCO for a period exceeding 9 years. This shows that the highest percentage of the respondents had served in their current SACCOs for a period of 4-6 years. The study further sought to establish the educational levels of the respondents in order to ascertain if it influenced the variables under study. From the findings 2.9% of the respondents had a certificate, 25.7% of the respondents had a diploma, 42.8% had a degree and 28.6 % of the respondents had a masters degree.

Risk Identification Methods and Performance of SACCOs

The study sought to establish the influence of risk identification methods on financial performance of SACCOs. The results of the analysis on factors associated with risk identification methods and how it influences financial performance of SACCOs are shown in Table 1. From the study, it was observed that to the moderate extent there are internal control systems which supports risk identification as indicated by a mean of 3.69, risk identification methods are incorporated in the organization risk policies to a moderate extent as indicated by a mean of 3.91 ,ethical considerations are structured to support risk identification to the great extent as indicated by a mean of 4.14;the majority of the respondents also agreed to the greater extent that understanding risk identification methods can improve the organizational performance as indicated by a mean of 4.03. Similarly to a moderate extent the majority of the respondents agreed that their organizations carries out comprehensive and systematic procedures in risk identification as indicated by a mean of 3.8.

Table 1: Risk Identification Methods

	N	Min	Max	Mean	Std. Dev.
The organization's internal control system is designed in a manner to support risk identification	35	1	5	3.69	.993
Risk identification methods are incorporated in the organization risk policies	35	2	5	3.91	.853
Organizations ethical considerations are structured in a manner that supports risk identification	35	2	5	4.14	.772
Understanding Risk identification methods can improve financial performance of your Organization.	35	1	5	4.03	.954
This SACCO carries out comprehensive and systematic procedures in identification of its risks relating to each of its declared aims and objectives	35	1	5	3.80	.994

Risk Monitoring Techniques and Performance of SACCOs

Table 2 presents means on perception on risk monitoring techniques in SACCOs.

Table 2: Risk Monitoring Techniques

	N	Min	Max	Mean	Std. Dev.
There is in place a regular reporting system regarding risk management for senior officers and management	35	1	5	3.91	.853
There is regular monitoring of the customer's business performance after the extension of their financing.	35	2	5	4.26	.741
The SACCO regularly reviews country ratings if their financing or investments are international	35	3	5	3.94	.802

Table 2: Contd.,

This SACCO encourages and provides resources to staff to undertake relevant training on risk monitoring to improve their skills in risk management.	35	3	5	4.14	.733
The credit limits for individual counterparty is strongly monitored	35	2	5	4.31	.796

The majority of respondents strongly agreed that senior management use a regular reporting system as indicated by a mean of 3.91. On whether customer business is regularly monitored to minimize risk a majority of the respondents agreed to a large extent as indicated by a mean of 4.26. The study also found out that SACCOs regularly performs benchmarking as this was indicated by a mean of 3.94. Further it was discovered that SACCOs provides resources for training on risk monitoring as this was evidenced by a mean of 4.14. It was also discovered that to the large extent credits for individual counterparty was strongly monitored as indicated by a mean of 4.31.

Risk Assessment Techniques and Performance of SACCOs

The study sought to establish the influence of risk assessment techniques on financial performance of SACCOs. The results of the analysis on factors associated with risk assessment techniques and how it influences financial performance of SACCOs are shown in Table 3.

Table 3: Risk Assessment Techniques

	N	Min.	Max.	Mean	Std. Dev.
Variability of earnings is estimated using computerized systems	35	1	5	3.77	.910
Simulation analysis is used to assess benchmark rate risk sensitivity	35	2	5	3.94	.906
Risks faced by this SACCO are assessed using Occurrence Likelihood	35	2	5	4.09	.781
SACCOs regularly assess positions of profit and loss	35	2	5	4.09	.818
SACCOs have quantitative support system for assessing customers credit standing	35	3	5	4.20	.833

Table 3 shows that the variability of earnings is estimated using computerized systems and simulation analysis is used to assess benchmark rate risk sensitivity as indicated by a mean of 3.77 and 3.94 respectively. The study established that to a great extent risks faced by SACCOs are assessed using occurrence likelihood and that SACCOs regularly assess their position of profits and losses as indicated by a mean of 4.09 for each. It was further noted that SACCOs have quantitative support system for assessing customers credit standing which helps in risk assessment as this was evidenced by a mean of 4.20.

Risk Mitigation Measures and Performance of SACCOs

The study sought to establish the influence of risk mitigation measures on financial performance of SACCOs. The results of the analysis on factors associated with risk mitigation measures and how it influences financial performance of SACCOs are shown in Table 4.

Table 4: Risk Mitigation Measures

	N	Min	Max	Mean	Std. Dev.
Sacco regularly reappraises collaterals	35	1	5	3.86	.912
Sacco regularly confirms guarantors intention to guarantee their financing with a signed document	35	2	5	4.09	.887
There are credit limits for individual loans	35	3	5	4.29	.710
SACCOs provide resources to staff to undertake relevant training on risk mitigation	35	2	5	4.11	.932
The SACCOs has a reserve used to increase Profit share of depositors	35	3	5	4.20	.719

Being the last activity in the risk management cycle, mitigation is critical and defines how well the organization achieves and maintains its risk within the desired levels. This was supported by the responses received from the respondents that SACCOs regularly reappraise collaterals and regularly confirm guarantor's intentions to guarantee their financing with assigned documents as indicated by a mean of 3.86 and 4.09 respectively. On whether SACCOs have credit limits for individual loans, the majority of respondents agreed to a large extent as indicated by a mean of 4.29. The study further noted that a majority of respondents strongly agreed that SACCOs provide resources to staff to undertake relevant training on risk mitigation as indicated by a mean of 4.11; they also have a reserve that is used to increase profit share of depositors, this was evidenced with a mean of 4.20. The study then carried out a regression analysis to test the significance of the influence of the independent variables, namely risk identification, risk assessment, risk monitoring, and risk mitigation on financial performance (ROA). The model summary is depicted in Table 5.

Table 5: Regression Model Summary

Model	R	R ²	Adjusted R ²	Std Error of the Estimate
1	.918 ^a	.843	.805	.51038

Analysis in Table 5 shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R² equals 0.843, that is, risk identification, risk analysis and assessment, risk monitoring, and risk monitoring explains 84.3% of financial performance, leaving only 15.7 percent unexplained. The researcher further conducted a multiple regression analysis, and the findings of the multiple regression model using ROA as the performance measure is depicted in Table 6.

Table 4.10: Multiple Regression Analysis for Return on Assets

Model		Unstandardized Coefficients		Standardized Coefficients	T	P
		B	SE	B		
1	(Constant)	.260	.460		.565	.023
	obj1	.313	.137	.254	2.729	.001
	obj2	.170	.140	.300	3.778	.002
	obj3	.431	.211	.113	2.217	.002
	obj4	.548	.220	.093	2.182	.000

The established multiple linear regression equation becomes:

$$Y = 0.260 + 0.131X_1 + 0.170X_2 + 0.051X_3 + 0.048X_4$$

Where

Constant = 0.260, shows that risk identification ,risk monitoring, risk assessment techniques and risk mitigation were all rated as zero, financial performance would be 0.260

X1= 0.131, shows that one unit change in risk identification methods results in 0.131 units increase in Financial performance

X2= 0.170, shows that one unit change in risk monitoring results in 0.170 units increase in financial performance

X3= 0.051, shows that one unit change in risk assessment techniques results in 0.051 units increase in Financial performance

X4= 0.048, shows that one unit change in risk mitigation measures results in 0.048 units increase in financial Performance.

CONCLUSIONS

It was concluded that Financial Risk Management positively affects the performance of SACCOs in Nakuru east sub-county. It can also be concluded that majority of the SACCOs have adopted largely risk management practices as a means of managing their performance. All the four areas of risk management: risk identification, risk monitoring, risk assessment and mitigation were integrated into their management processes. It can further be concluded that the respondents are gradually embracing financial risk management techniques as a tool for boosting the performance of SACCOs in Nakuru. The study found out that training of employees on the financial risk management it would enhance their knowledge and skills with the same. There is a need to look at other aspects such as strategic management and evaluation of financial risk management on the performance of SACCOs. From the outcome of the study, it is recommended that management of the SACCOs should consider risk management as a critical determinant of their performance. In their risk identification, the SACCOs should ensure that there are clear methods and policies to direct their activities. It is also important that the SACCOs take a critical look at their risk analysis approaches so as to understand how it's outcome influences their performance. Risk monitoring being a continuous process should be implemented in a progressive manner that allows the SACCOs to understand their potential risk and hence guide in the use of other risk management activities. It is also important for the SACCOs to adopt new approached and tools for carrying out their risk evaluation, reliance on the traditional and historical information and records as key sources for evaluation process may lower the chances of understanding the inherent risks in their portfolio.

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