

**RISK MANAGEMENT AND FINANCIAL PERFORMANCE OF DEPOSIT
TAKING SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN
UASIN GISHU COUNTY, KENYA**

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ABSTRACT

Risk management framework is important for the financial stability of Deposit Taking Saccos (DTS) and other money lending institutions in Kenya. Effective risk management can decrease the probability of default and ensure financial stability in the Savings and Credit Cooperative Societies. The aggregate ratio of non-performing loans to gross loans of Deposit Taking SACCOS has increased in successive years since 2013 while their level of compliance with capital adequacy ratios as well as the Sacco societies Act, 2008 and SASRA regulations and guideline has remained low. Furthermore, most DTSs are still not able to meet their short term obligations to its members especially loan disbursement. The general objective of the study was to analyze the effect risk management practices on the financial performance of Deposit Taking SACCOS in Uasin Gishu County, Kenya. Descriptive research design was used in this study. Primary data was collected using structured questionnaire having both closed and open ended questions from employees in 7 Deposit Taking SACCOS in Uasin Gishu County. Stratified simple random sampling were used to select 35 employees from the 12 SACCOS. Secondary data was collected from journals, books, published and unpublished research project, SASRA published audited annual reports government reports and website through internet search and in the university library. Data collected was collated, edited, and processed using SPSS version 20 and excel spreadsheet. Descriptive statistics, correlation analysis and multiple regressions were used in the data analysis. The findings of the study revealed a significant and positive relationship between predictor variables (credit management practices, liquidity risk management practices and compliance risk management practices) and financial performance. The three predictor variables had a positive coefficient indicating an increased use of credit risk management practices, liquidity risk management practice and compliance risk management practices would result into increased profitability. Credit risk management practice had greater effect on profitability given the larger coefficient of 0.772 compared to 0.468 for liquidity risk management practices and 0.214 for compliance risk management practices. The study concludes that consistent and effective management of risks in the SACCOS would improve their financial performance hence the need to select and use appropriate risk management practices while ensuring continuous review and control. The study recommends that SACCOS should ensure cost effective and timely risk identification, measurement, prioritization and mitigation measures to ensure increased financial performance. In addition the management of licensed

Deposit Taking SACCOs should strategically and continuously adopt effective and efficient credit risk management practices to minimize cases of loan default so as to enhance profitability and financial performance. Besides SACCOs should aggressively mobilize members' shares and ensure retention of earnings so as to grow their capital reserves to boost capital adequacy and meet the capital reserve requirement by SASRA. This would ensure that SACCOs have sufficient funds to meet credit obligations to clients and run the day to day operational costs. Furthermore SACCOs should strive to ensure full compliance with SACCOs Society Act 2008, SASRA regulations on capital adequacy, asset quality, earning rating, liquidity rating, risk management, board composition and quality.

INTRODUCTION

1.1 Background of the Study

The Deposit-taking Sacco Societies (DTSS) is part of the larger Sacco sub-sector in Kenya which comprises the deposit-taking and the non-deposit taking Sacco Societies. Financial performance is one of the key objectives for all organizations including SACCOs. It is measured by use of many ratios and models like the return on investment, profit margin, efficiency ratios, and liquidity ratios. All organizations strive to utilize their resources effectively so as to achieve higher financial performance (Fujo and Ali, 2016). The value of a company or organization is always positively reflected by profitability and negatively by the risks that arise during the development of the economic and financial activity (Loredana, 2012).

The Sacco Societies Act (Cap 490B) and the Regulations provide for the key prudential norms and requirements which DTS are required to fully comply with in order to maintain financial stability. The key requirements which include core capital and capital adequacy ratios, asset quality, non-earning assets, liquidity requirements, limits on external borrowing, equity investments and generation of earnings. These are supplemented by regulatory guidelines issued by the Sacco societies regulatory authority from time to time, together with financial best practices.

For instance, the Sacco Societies Act (2008) requires DTSS to hold and maintain minimum liquidity, develop and implement contingency liquidity plans so as to effectively serve the members. This has led to situations where the DTSS borrow expensively from commercial banks to bridge temporary illiquidity and this has evidently threatened financial stability of the DTSS, and hence safety of member deposits. The regulatory framework also requires DTSS to maintain minimum core capital of Kshs 10 million, together with the following capital adequacy ratios: core capital to total assets, core capital to deposit liabilities and institutional capital to total assets at the ratios of 10 percent, 8 percent and 8 percent respectively (Sacco Society Act, 2008). According to Sacco's supervision annual report (2016) full compliance for capital adequacy for individual DTS has remained a challenge, with institutional capital to total assets ratio being the most non-complied with.

While there have been several reform initiatives in saving credit cooperative societies subsector in the past in Kenya like the introduction of SACCOs specific regulation and guidelines in recognition of the unique financial intermediation function that SACCOs play in an economy,

SACCOs in Kenya are still exposed to risks which threaten their operations leading to adoption of risk management technique to mitigate and improve performance (SASRA, 2013)

1.1.1 Risk management

Risk-taking is an inherent and unavoidable aspect of financial service provision against which reward in the form of profits is sought (Musimbi, 2015). Risk is the probability or threat of damage, injury, liability, loss, or any other negative occurrence that is caused by external or internal vulnerabilities, and that may be avoided through preemptive action. Risk management is simply a practice of systematically selecting cost effective approaches for minimizing the effect of threat realization to the organization. All risks can be never fully avoided or mitigated simply because of financial and practical limitations (Moteff, 2005). Crouhy, Galai and Mark (2006) categorized risk into market risk, credit risk, liquidity risk, operational risk, legal risk, business risk, strategic risk and reputation risk. Similarly, SASRA (2015) classified risk into strategic risk, credit risk, operational risk, liquidity risk, interest rate risk and compliance risk. This study adopted SASRA classification and considered three major risks which include credit risk, liquidity risk and compliance because it is the regulatory authority of deposit taking Saccos.

The strategies to manage risk include transferring the risk to another party, avoiding the risk, reducing the negative effect of the risk, and accepting some or all of the consequences of a particular risk (Hubbard, 2009). Risk management practices are aim at controlling opportunities and hazards that may result in risk and therefore financial institutions must have strong and rational framework for decision making by which firm's objectives can be attained as a way of effectively managing risks (Frank, Simon and Josephine, 2014). Because of the nature of business of SACCOs and banks, several risk factors like credit, liquidity, operational and market risks are highly probable hence putting in place effective risk would ensure that they remain intact amid the intense competition in the financial industry (Ross, Westerfield and Jordan, 2008).

According to ACCOSCA (2014) risk management in SACCOs involves ensuring that members' savings are effectively safeguarded while at the same time allowing the business growth and effective financial performance. It entails proper identification and assessment of risks to avoid any surprises in running the SACCO while ensuring clear ownership and accountability of risks amongst staff. It also entails effective and efficient allocation of resources to manage the risks, compliance with legal and regulatory requirements as well as best practices and ensuring that risk considerations are engrained in business decision making. Collier, Berry and Burke (2004) established that risk management in an organization influence the organization performance. Therefore efficient risk management is highly relevant in providing better returns to the shareholders (Akkizidis and Khandelwal, 2008). This is because it minimizes the complexities involved in planning, executing, controlling and the overall running of a business which are critical to success by maximizing profitability which is one of the key indicators of financial performance.

1.1.2 Financial performance of Deposit-taking SACCOs

In Kenya, cooperative societies create an important part of the economy. The Vision 2030 of Kenya recognizes SACCOs as a prime mover in financial resource mobilization to create a

vibrant and globally competitive financial sector in Kenya. They are estimated to provide livelihood to 63% of Kenyans both directly and indirectly (SASRA, 2013). The traditional Savings and Credit Cooperative Societies (SACCOs), described in law as Non-Deposit Taking SACCOs (NDTS) provide a limited range of savings and credit products, are registered and supervised under the Cooperative Services Act, CAP 490 by the commissioner of co-operatives.

The Deposit taking Sacco Societies (DTSs) are licensed and supervised under the Sacco Societies Act of, 2008 and is part of the larger Sacco sub-sector in Kenya which comprises the deposit- taking and the non-deposit taking Sacco Societies (Sacco supervision annual report, 2016). Besides the normal savings, deposit taking Sacco's also provide basic banking services which include payment services, demand services and ATM services. They also provide Front Office Services Activity (FOSA). The Sacco Societies Act (2008) and SASRA regulation provide the minimum operational regulations and prudential standards required of deposit-taking Sacco Societies to ensure financial stability of the Sacco subsector. Financial performance is the measure of the results of the firm's policies and operations within a specified time period in monetary terms. The results are expressed in form of profit or losses. Operating and financial ratios have long been used as tools for determining the condition and the performance of a firm (Ogilo, 2012).

Financial performance of SACCOs can be viewed in light of their overall profitability and return on investment. Deposit taking Sacco's recorded growth in financial performance in 2015 as shown in Table 1. The total asset base was Kshs 393.49 Billion, as compared to Kshs 342.84 Billion recorded in 2014 and Kshs 301.5 Billion in 2013. This represented a growth of 14.8% in 2016 and 13.7% in 2015. The total assets grew by 13.7 percent to Kshs 352.8 Billion from 2014. This was supported by growth in deposits, capital reserves and loans and advances portfolio in both the years. The aggregate core capital also registered relative growth compared in 2016 as compared to 2015 and in 2015 as compared to 2014. There was reduction in the number of DTS from 184 in 2014 to 177 in 2015 and further reduction to 176 in 2016 (Saccos annual Supervision reports, 2015 and 2016).

Table 1.1: Trends in Aggregate DTSs Performance in Kenya in 2014-2016

Parameter Measurements	Year		
	2014	2015	2016
Number of DT-SACCOs	184	177	176
Membership	3,008,497	3,145,565	3,632,597
FINANCIALS	Kshs Millions	Kshs Millions	Kshs Millions
Assets	301,537	342,848	393,499
Deposits	205,974	237,440	273,579
Gross loan	228,524	258,183	297,604
Allowance for loan loss	9,213	7,103	8,683
Loans and advances	219,312	251,080	288,291
Capital Reserves	43,086	50,835	61,261
Core Capital	33,252	41,712	54,943

Source: Sacco Supervision Annual Reports (2015 and 2016)

According to Saccos annual supervision report (2016), the financial performance of individual Saccos was varied given the level of compliance with the prescribed capital adequacy ratios like core capital of 10 million, core capital to total assets ratio of 10%, core capital to total deposit ratio of 8% and prescribed institutional capital to total assets ratio of 8%. Notably, only 69 DTSs complied with the prescribed institutional capital to total assets ratio of 8%. The report also indicated out that the loans which was the key asset for DTSs was at risk given the increase in the ratio of non-performing loans to gross loans to 5.23% from 5.12% in 2015 driven by the increase on the non-performing loans from Kshs 13.21 billion in 2015 to Kshs 15.57 billion in 2016. The aggregate liquidity decreased from 55.90% registered in 2015 to 49.95% in 2016. The report pointed out that despite the impressive liquidity measurement being registered in successive years over and above the prescribed minimum, many DTSs were unable to meet their short term obligations to their members, particularly the disbursement of loans.

A study by Chavez (2006) based PEARL rating found that the financial performance of the SACCO sector is extremely weak and translating to weakness in other areas, especially governance, fiscal discipline, financial, operational, internal controls, and the risk management involved in running a financial institution. Mvula (2013) in a report on common issues affecting performance of DTSs, pointed out that the issues affecting performance of SACCOs included inadequate capital, poor asset quality, poor governance, poor profitability, poor liquidity and non-compliance. Similarly, Makori, Munene and Muturi (2013) indicated that SACCOs in Gusii faced various compliance challenges including non-separation of shares from deposits, high dependence on short-term external borrowing, lack of liquidity monitoring system, high investment in non-earning assets, inadequate managerial competencies and poor financial management. Ochieng and Ronga (2016) established that 80% of the Saccos had not fully complied with the Societies Act of 2008.

SASRA guideline (2015) on risk management practices for deposit taking Sacco societies, requires each DTS to develop its own comprehensive Risk Management Program (RMP) tailored to its operational circumstances and needs. The guideline further state that the RMP should include at a minimum strategic risk, credit risk, operational risk, liquidity risk, market risk and compliance risk. While the above research outcome provide insight to challenges faced by SACCOs, risk management practice and the aggregate financial performance of DTSs in Kenya, there is no such specific information for Deposit Taking Saccos in Uasin Gishu County.

1.2 Statement of the Problem

SACCOs are important economic players as they serve millions of members; the industry is part of the cooperative sector that has positively impacted on the lives of many Kenyans over the years. SACCOs mobilize both domestic and international financial resources. Their survival is therefore of great significance. SACCOs however face a number of challenges that affects their performance (Chavez, 2006; Mvula, 2013; Ngugi, 2015). Others studies indicate that SACCOs are also face with various compliance challenges (Makori et al., 2013; Ochieng and Ronga, 2016). The Sacco Societies Act, 2008 and the SASRA regulations provide the key prudential norms and requirements which DTS are required to fully comply with in order to maintain financial stability while according SASRA guideline on risk management (2015) SACCOs are required to develop a comprehensive risk management program to mitigate market risk, liquidity risk, strategic risk, operational risk, credit risk and compliance risk.

Despite of the Act, SASRA regulations and guidelines, SACCOs especially Deposit Taking Saccos (DTs) still face numerous risk because of the prevailing economic conditions that affects their operations and exposes them to the risk. The Saccos supervision annual report (2016) show an increase in the aggregate ratio of non-performing loans to gross loans as well as low level of compliance with the capital adequacy ratios especially with the prescribed institutional capital to total assets ratio of 8%. And further that many DTs were still unable to meet their short term obligations to their members, particularly the disbursement of loans. Previous studies have been on the effect specific risks have on financial performance of SACCOs in Kenya (Mwangi, 2014; Omino, 2014; Ndungu, 2013; Otieno, 2013; Essendi, 2013). No study such study has been done on deposit taking Saccos in Uasin Gishu County. The question therefore is what are the crucial risk management practices and how do they effect on financial performance of DTs in Uasin Gishu.

1.3 General Objective of the Study

The general objective of the study was to analyze the effect of risk management on financial performance of deposit taking SACCOs in Uasin Gishu County, Kenya.

1.3.1 Specific Objectives of the Study

- i. To determine the effect of credit risk management on financial performance of SACCOs in Uasin Gishu County
- ii. To investigate the effects of the liquidity risk management on financial performance SACCOs in Uasin Gishu County
- iii. To examine the effects of compliance risk management and financial performance of SACCOs in Uasin Gishu County

1.3.2 Research Questions

This study sought to answer following research questions;

- i. What are the effects of credit risk management on financial performance SACCOs in Uasin Gishu County?
- ii. What are effects of liquidity risk management on financial performance SACCOs in Uasin Gishu County?
- iii. What are the effects of compliance risk management and financial performance SACCOs in Uasin Gishu County?

1.4 Significance of the Study

The study generated useful knowledge and information for researchers, development practitioners, academicians, policy makers, planners and Sacco's management in designing business strategies, policies and procedures. This is expected help the SACCOs to pursue their missions and preserves their business interests and shareholders' value and thereby ensure improved financial performance by mitigating the various risks in the SACCOs in Kenya.

1.5 Scope of the Study

The scope of this study was on all SASRA licensed Deposit Taking Saccos in Uasin Gishu County, Kenya. This study focused on risk management and financial performance of cooperative societies in Uasin Gishu County.

1.6 Limitation of the study

The Researcher experienced some difficulty in convincing the respondents to spare some time to fill the questionnaires because of their busy schedules. To address this limitation respondent were given adequate time as per their request to fill the questionnaire. Collection of the questionnaires was also a problem since the SACCOS were in different locations of the Uasin Gishu County and the target respondents were not always in the office. To address this limitation respondent some respondents were requested to scan and send the filled questionnaires through the email at the researchers cost.

1.7 Organization of the Study

This research project is organized into five chapters: the introduction is covered in chapter one, literature reviewed in chapter two; research methodology is described in chapter three, research findings presented in chapter four and summary, conclusion and recommendations given in chapter five. References were also given in APA format while the appendices included letter of transmittal, the data collection instruments, research permit and list of licensed Deposit Taking Saccos in Uasin Gishu County.

LITERATURE REVIEW

2.1 Introduction

The chapter presents theoretical review explaining the theories applied in this study. It covers empirical review on credit risk management and financial performance, liquidity risk management and financial performance and corporate governance and financial performance. The chapter also discusses conceptual framework and presents a summary of literature and research gaps. .

2.2 Theoretical Review

2.2.1 Modern Portfolio Theory

Modern Portfolio Theory (MTP) was developed by Harry Markowitz in 1950. He suggested that a firm can limit the volatility its portfolio while improving its performance by spreading the risk among different types of securities. MTP is a theory of finance that attempts to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets. One principle of investing states that the higher the risk, the higher the potential return and conversely, the lower the risk, the lower the return.

According to Modern Portfolio Theory, a portfolio which is a combination of individual investments exhibits risk and return characteristics based on its composition and the way those components correlate with each other. For each level of risk, there is an "optimal" asset allocation that is designed to produce the best balance of risk versus return. An optimal portfolio will attempt to balance the lowest risk for a given level of return and the greatest return for an acceptable level of risk. The full spectrum of investments must be considered because the returns from all these investments interact hence the relationship between the returns for assets in the portfolio is important (Reilly & Brown, 2011).

The application of portfolio theory to credit risk management requires that financial institutions manage the credit risk inherent in the entire loan portfolio as well as the risk in individual credits

or transactions. To manage their portfolios, bankers must understand not only the risk posed by each credit but also how the risks of individual loans are interrelated.

2.2.2 Liquidity Preference theory

The theory was advanced by John Maynard Keynes in 1936 in his book the “general theory of employment interest and money”. According to Keynes, interest is purely a monetary phenomenon because the rate of interest is calculated in terms of money. He also indicated that interest is the price paid to people for surrendering their liquid assets. Hence, the greater the liquidity preference the higher shall be the rate of interest. Since liquidity preference constitutes the demand for money, the higher a person’s liquidity preference, the less likely the person is to invest long term since cash does not earn an income (Varun, 2011).

The theory asserts that people prefer cash over other assets for three specific reasons namely for transaction, precautionary and speculative motives (Belke and Polleit, 2010). The transaction motive is premised on the fact that firms hold some cash with them to facilitate the day to day operations depending on the earnings and specific requirements. Secondly, the precautionary motive for holding money refers to the desire to hold cash to meet the unforeseen emergencies and contingencies. Equally, businessmen keep cash in reserve to overcome unfavorable conditions or to gain from unexpected deals.

Keynes holds that the transaction and speculative motives are relatively inelastic but are highly income elastic (Kumar, 2015). Furthermore, the speculative demand relates to the desire for a firms to hold cash to take advantage of the changes in the prices of bonds and securities. Keynes notes that the lower the rate of interest, the higher the speculative demand for money while the higher the rate of interest, the lower the speculative demand for money (Tushar, 2016)

In the context of this study, the theory is applicable to understand how DTSs manage their liquidity so as to avoid the risks by meeting all the short term obligations and ensure financial performance. DTSs needs cash money to for the day to day operations including over the counter withdrawals and disbursement of loans, they need cash to manage the unforeseen occurrences as well as cash to invest in long term assets.

2.2.3 Agency theory

Agency theory has its origin in economic theory. The theory was fully developed by Jensen and Mackling in 1976. It states that agent is likely to pursue interests that are not favorable to the principal or shareholders in the presence of information asymmetry. Agency theory focuses on the relationship and goal incongruence between managers and shareholders. Agency relationships occur when one partner in a transaction (the principal) delegates authority to another (the agent) and the welfare of the principal is affected by the choices of the agent (Fama, 1980). Padilla (2002) opined that in agency theory, the principal expect the agents to act and make decisions in his interest.

In several occasions, agent may not necessarily make decisions in the best interest of the principals. This is because the agent may succumb to self-interest, opportunistic behavior and violate the contract between the interests of the principals and the agents (Odhiambo 2012). As such there is bound to be a conflicts between the agent and the principal. The theory therefore prescribes that people or employees are held accountable in their tasks and responsibilities.

Employees must constitute a good governance structure rather than just providing the need of shareholders, which maybe challenging the governance structure. Agency theory provides strong support for risk management as a response to mismatch between managerial incentives and shareholder interests. The agency theory emphasizes the need for risk management to align the interests of managers and shareholders and to contribute to the financial performance of the firm.

In this context the theory explains the relationship between the members of the SACCO who are the agents and the managers, employees and board of directors who run the SACCO on their behalf so that measure are put in place to minimize any eminent risk.

2.2.4 Stewardship Theory

Stewardship theory suggests that stewards will behave in a pro- social manner, a behavior which is aimed at the interest of the principal (Zahra et al, 2009). According to Odhiambo (2012) a steward protects and maximizes shareholder's wealth through firm performance, by so doing, the steward's utility functions are maximized. In this perspective, stewards are managers working to protect and make profits for the shareholders. Stewardship theory emphasizes on the role of management being stewards, integrating their goals as part of the organization (Davis, Schoorman and Davidson, 1997).

The theory recognizes the importance of governance structures that empower the steward and offers maximum autonomy built on trust (Donaldson and Davis, 1991). It stresses on the position of employee to act more autonomously so that the shareholders returns are maximized. Indeed, this can minimize the costs aimed at monitoring and controlling employee behavior (Davis et al., 1997). This theory has a great link to liquidity and compliance management of SACCOs in that managers must be adhere to the laws, regulations and guidelines to remain in operation and ensure increased financial performance. Also they need to ensure the level of delinquent loans is minimized as stewards of the organization.

Therefore, agents who are the owners must assess the type of manager they employ and establish appropriate governance structures so as to maximize the management efficacy and drive the organizational performance. In this context, SACCOs that employ steward managers can leverage the managers by establishing firm mechanisms and organizational structures that support the manager's activities to meet the needs of the organization and result in increased performance (Galbraith 1973, Lawrence and Lorsch 1967).

2.3 Empirical Review

2.3.1 Credit risk management and financial performance

The importance of credit risk management in banks is due to its ability in affecting the banks' financial performance, existence and growth. Several studies have been done relating to credit risk management. Gisemba (2010) found out that SACCOs screened clients and analyzed risk before awarding credit to minimize cash loss and loan default. He concluded that there was a positive relationship between credit risk management and financial performance. Similarly, Kimari (2013) indicated that there was a direct relationship between credit risk management practices and financial performance and recommended adoption and implementation of sound credit risk management practices and credit risk policy.

Gaitho (2010) observed that majority of the SACCOs in Nairobi used credit risk management practices to mitigate risks. Njeri (2010) in a study of found that banks had adopted strategic credit risk management practices including risk assessment, monitoring, evaluation, and control and reporting to ensure financial performance. Similarly, Omasete (2011) found that insurance companies adopted risk management practices in their operations because of their impact on financial performance. Njanike (2009) on the contrary found that effective credit risk management was absent in banks in Zimbabwe, this to occurrence of the banking crisis, and inadequate risk management systems hence financial crisis.

2.3.2 Liquidity Risk Management and Financial Performance

Liquidity risk arises when a financial institution is not able to meet its financial obligations (Puneet and Parmil, 2012). The risk arises from maturity mismatch where liabilities have a shorter term than assets (Sambasivam and Biruk, 2013). The liquidity risk management aims at mitigating the impact of the maturity mismatch on the lenders' statement of financial position. According to Muneeb and Kashif (2012), good liquidity management should be based on the principle of early cash collection from debtor and hold up of current debts and obligations as much as possible.

Nguyen and Perera (2012), in a study to analyze the relationship between liquidity risk and bank market power, found that listed banks usually held more liquid assets than non-listed banks to mitigate against liquidity risk. Usama (2012) also found that working capital management and cash conversion cycle had a positive effect on liquidity while average collection period had a negative effect on liquidity and therefore profitability and firm's performance. Muthoni (2016) found out that cash management policies had contributed to enhanced liquidity of the Saccos by ensuring that loans were disbursed upon approval and that only few Saccos invested excess cash in marketable securities. Rehema (2013) further indicated that poor asset quality leads to high levels of non-performing loans leading to liquidity shortages, inflated asset values and overstated earnings.

Sanghani (2014) found that current ratio and increase in operating cash flow positively affect the financial performance of non-financial companies listed at the Nairobi securities Exchange (NSE). El-Mehdi (2014) rates financing and liquidity upon several factors like, the adequacy of liquidity sources, ability of the institution to meet demand for liquidity needs without affecting operations, availability of cash convertible assets without loss, access to funding sources, degree of reliance short term source of financing to fund long term assets and deposit stability. According to Owino (2011) highly leveraged firms are exposed to liquidity risks because of the obligation to honor repayment of interest and principal debt which leads to huge cash outflows.

Omino (2014) established that Saccos adopted more cautious positions in their current liabilities to ensure that operating cash flows were sufficient to cover the short term obligations. Waleed, Pasha and Akhtar (2016) observed significant connection among bank liquidity ratios and returns on equity, net profit margin and Tobin q. Similarly, Khidmat and Rehman (2014) concluded that liquidity had high positive effect over Return on Assets of Chemical sector in Pakistan. Alshatti (2015) opined that banks should adopt a general framework of liquidity management to ensure efficiently execution of their operations while Ware (2015) recommended having short cash conversion cycle and increasing the current ratios.to increase profitability.

2.3.3 Compliance Risk Management and Financial Performance

Compliance risk arises from violations or non-compliance with prescribed practices, agreements, laws, regulations, rules, ethical standards, as well as from incorrect interpretation of laws or regulations that guides the operation of the institutions (Central Bank of Kenya, 2013). According to the SACCO societies Act (2008), all SACCOs in Kenya are required to maintain a maximum of 5% ratio on non-performing loans to total loan portfolio. Increasing amount of non-performing loans to total loan portfolio is an indication of declining asset quality. The Act also prescribes the minimum core capital as Kshs 10 million. The regulator further requires all deposit taking SACCOs to maintain a core capital to total deposit ratio of 8%, core capital to total assets ratio of 10% and institutional capital to total assets of 8% and that all SACCOs to maintain a 25% ratio on external borrowing to total assets (SASRA, 2015)

According to Tunga (2013), audit control environment and accountability had a significant positive relationship with financial performance in banks and recommended that they should maintain and strengthen control environment in order to increase their financial performance. Olando, Jagongo and Mbewa (2013) found that compliance with Sacco's by-laws in Kenya was inadequate and that incomes from investments did not adequately cover their costs. He recommended that the Government should review legal framework to ensure that institutional capital is used to grow Sacco's wealth.

Ngugi (2015) in study of challenges facing deposit taking Saccos in Njeri County, found that ICT capacity was inadequate, SACCOs had not attained the required capital ratio and 80% of the SACCOs had not fully complied with the Societies' Act of 2008 (revised 2012). Nthimba and Jagongo (2015) found that most deposit taking SACCOs in Nairobi County employed strategies which included active oversight board, policies, procedures and limits and comprehensive internal controls in financial risk management. They indicated the need for sensitization and education of members by SASRA on proper financial risk management strategies by all deposit taking SACCOs.

Ochieng and Ronga (2016) established that SACCOs in Nairobi County had not attained the required human resource capacity and 80% of the Saccos had not fully complied with the Societies' Act of 2008. They recommended review of the Act to enhance compliance, establishment of training program to enhance management capacity on compliance issues and initiation of change management to set realistic user expectation, goals and objectives by the board of directors. Further, Waiganjo, Wanyoike and Koitaba (2016) found that the quality of the Board of Directors, staff competence, and corporate governance had a significant effect on the financial performance of the SACCOs. They recommended modification of SASRA regulations to upgrade the roles and qualifications of the Board members and the need of more staff involvement in decision making at higher levels to develop their potential as future managers and directors of the SACCOs

2.4 Summary of Literature and Research Gaps

Risk management is one of main business activities of financial institutions including Deposit Taking Saccos (DTSs). From literature reviewed the most inherent risk in SACCOs are market risk, credit risk, liquidity risk, operational risk, compliance risk and business risks (Crouhy et al., 2006; SASRA Guideline, 2015). Risk management involves the identification, assessment, and

prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events or to maximize the realization of opportunities. Most financial institutions including SACCOs are exposed to the risk of insolvency as a result of the various risks that they face in their operations. Enhanced understanding of how risk effects financial performance may decrease the probability of insolvency and provide greater stability to a depository institution. Empirical review show that liquidity risk, credit risk and compliance risk affects financial performance (Mutua, 2014, Rehema, 2013, El-Mehdi, 2014) because they affect profitability which is a key variable of financial performance. It can be assumed from the reviewed literature that effective risk management ensures that the organization meets its obligations when they become due and therefore minimizes the risks of insolvency. While the reviewed literature give information on the challenges faced by SACCOs, specific risk management practices, financial performance of Deposit Taking SACCOs and the relationship between specific risk management practices and financial performance of SACCOs in Kenya. None of the literature reviewed considered the collective effect of more than one risk management practice on financial performance of DTSs in Kenya and in Uasin Gishu County. Furthermore, there is no specific information on risk management practices and financial performance for Deposit Taking Saccos in Uasin Gishu County.

RESEARCH METHODOLOGY

This chapter describes the research design and research methodology that was used in the study, the chapter was presented under the following sub-headings: research design, the study area, population of the study, sample and sampling procedures, data collection instruments and procedures and data analysis.

3.1 Research Design

The research adopted a descriptive research design. It portray accurately the characteristics of a particular individual situation or group (Gall and Borg, 2006). It was preferred because it could be used to investigate problems in realistic settings (Kothari, 2006). It enabled the researcher to collect comprehensive data by interviewing or administering questionnaires to a sample of selected respondents and thus provided relevant and specific information. Data was collected and used to describe the relationship between risk management and financial performance of Deposit Taking Saccos in Uasin Gishu County.

3.2 The Study Area

The study was carried out in Uasin Gishu County, North Rift region. Uasin Gishu County is situated in the mid-west of the Rift Valley covering an area of 3,345.2 square kilometers and lies between longitude 34 degrees 50' east and 35 degrees 37' west and latitude 0 degrees 03' south and 0 degrees 55' north . The county is further sub-divided into six sub-counties namely; Soy, Turbo, Moiben, Ainabkoi, Kapseret and Kesses. The county has an estimated population of 894,179 with urban population contributing about 31% of the entire population. The population density is 267 persons per sq.km .The County has potential labor force of 550,000 (56%) of the entire population. Hence 44% of the population is dependent. Uasin Gishu County is a highland plateau with altitudes falling gently from 2,700 metres above sea level to about 1,500 metres

above sea level. The County lies within the Lake Victoria catchment zone and all its rivers drain into the lake.

3.3 Target Population of the Study

According to Mugenda and Mugenda (2003), a population refers to an entire group of individuals, events or objects having a common observable characteristic. In other words, population is the aggregate of all that conforms to a given specification. The Target population was 86 employees from 12 deposit taking SACCOs licensed by SASRA in Uasin Gishu County (Appendix 4). The employees included 12 branch managers, 12 administrators, 24 credit officers, 12 finance officers, 12 marketing officers and 24 auditors/accountants.

3.4 Sampling Design

Sampling is a process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group (Orodho, 2002). In this study stratified random sampling was used to select 35 employees from the 12 deposit taking SACCOs licensed by SASRA in Uasin Gishu County as indicated in Table 3.1. This is 36.4% of target population since according to Mugenda and Mugenda (2006), a sample of 30% is representative in a descriptive research.

The formula, $n_i = n \cdot p_i$ was then be used to select respondents from each category of employees (Kothari, 2004)

Where n_i = number of elements to be drawn from stratum i
 n = total sample
 p_i = proportion of population included in stratum i

Table 3.1 Sample size

Categories	Population	$n \cdot p_i$	n_i
Branch Managers	12	35(12/96)	4
Credit Officers	24	35(24/96)	9
Administrators	12	35(12/96)	5
Finance Officers	12	35(12/96)	4
Marketing officers	12	35(12/96)	4
Auditors/Accountants	24	35(24/96)	9
Totals	96		35

Source: Own conceptualization (2017)

3.5 Data collection instruments

The main research instrument that was used in the study was questionnaires. The questionnaire was developed by the researcher based on the research objectives. Structured questionnaire had both closed and open ended questions. Closed ended question was used because the researcher sought to find out specific answers to the questions while open ended questions was used as the study seeks the opinion of the respondents concerning the problem in question. The questionnaire was divided into five main sections which included general information of

respondent, credit risk management section, liquidity risk management section, corporate governance section and financial performance section

3.5.1 Validity of data collection instruments

Validity is the accuracy or meaningfulness and technical soundness of the research. It is the degree to which a test measures what it purport to measure. (Mugenda and Mugenda, 2003). The instruments was given to lecturer as experts to assess their validity. Suggestions and inputs was incorporated accordingly to improve on the instruments. Content validity was also done to ensure the instruments covered exhaustively the study objectives. This was for the purposes of determining validity of instruments and identifying unclear items in the instruments.

3.5.2 Reliability of data collection instruments

Reliability estimated the consistency of measurement, or more simply the degree to which an instrument measured the same way each time it is used under the same conditions with the same subjects. The developed questionnaire was further assessed for reliability. The test-retest method was used in assessing reliability. The researcher administered the questionnaires to randomly selected subjects who were not involved in the study. After a period of two weeks the researcher again administered the same questionnaires to the same subjects under the same conditions. Both sets of questionnaires were scored and the scores correlated using Pearson product moment correlation coefficient. The correlation coefficient was 0.76 and therefore the questionnaire was considered reliable.

3.6 Data Collection Procedures

In this study data was collected using structured questionnaire with both closed and open ended questions. Data was collected from managers and employees in operations, credit management, and risk management sections. Some questionnaires were dropped and picked while others were mailed though emails of the selected respondents. Secondary data was collected from past studies, SASRA published audited annual reports for the five year period from 2011 to 2015, journals, government reports and website.

3.7 Data analysis and presentation

3.7.1 Data analysis

The data collected was collated, edited , validated and processed using the Statistical Package for Social Science (SPSS) version 20 and excel spreadsheet will be used to aid in the computation of the statistics. Descriptive and inferential statistics were used in the analysis. Descriptive statistics involved the use of mean, standard deviations, frequencies and percentages to describe the features of the independent variable so as to develop the basic features of the study and form the basis of virtually every quantitative analysis of the data

Inferential statistics involved the use of correlation and regression analysis. Correlation analysis was used to determine both the significance and degree of association of the variables. The correlation technique is used to analyze the degree of relationship between two variables. It varies between -1 and + 1 with both ends of the continuum indicating perfect negative and perfect positive relationship between any two variables respectively. Regression analysis was used to determine the significance of the relationship between the dependent variable and all the independent variables collectively and individually. The regression model below was applied in the analysis.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where: Y	=	Financial performance
X ₁	=	Credit Risk Management practices
X ₂	=	Liquidity Risk Management practices
X ₃	=	Compliance Risk Management practices
β ₀	=	Constant
β ₁ , β ₂ , β ₃	=	Beta values
e	=	error term

3.7.2 Data presentation

The analyzed data were presented in tables, charts, graphs and figures to allow for easy understanding and interpretation of findings

3.8 Ethical Issues

Ethical considerations relate to the moral standards that the researcher should consider in all research methods in all stages of the research design. After approval from the University was obtained to conduct the study, permission was obtained from the management of all the sampled deposit taking SACCOs in Uasin Gishu County. The participants were also informed that the information they provided was not be used in any way to harm the participants or exploited for commercial and selfish personal gain, but only for academic purposes. Full disclosure, fair treatment and privacy were also practiced through a cover letter for all the questionnaires.

RESEARCH FINDINGS

This chapter presents findings of the study. Both descriptive and inferential outputs are presented together with the interpretation of the findings.

4.1 Response Rate

From the 35 questionnaires administered, 30 questionnaires were properly filled and returned. This represents an overall response rate of 85.7%. According to Babbie (2002) return rate of 50% is acceptable to analyze and publish, return rate of 60% is good while 70% is very good. This implies that return rate of 85.7% was very good.

4.2 Descriptive Statistics

4.2.1 General respondents and business information

4.3.1.1 Gender of the Respondents

Respondents were asked to state their gender and the results are shown in the figure 4.1 below.

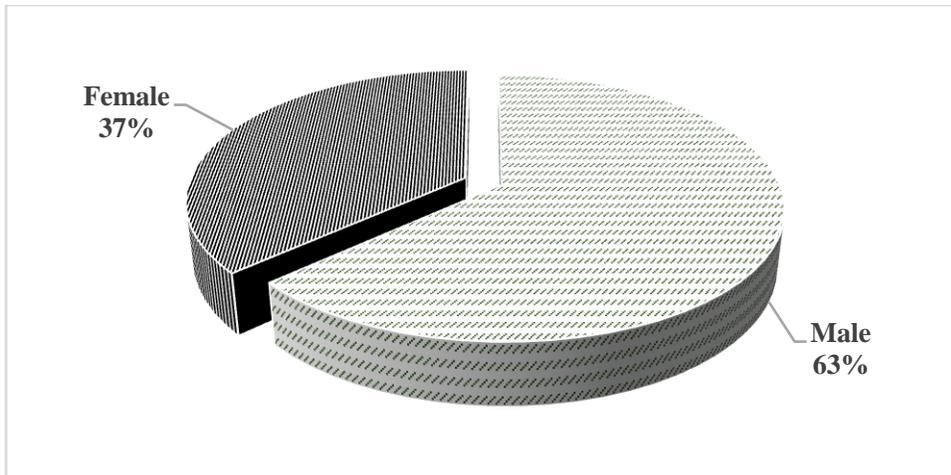


Figure 4.1: Gender of respondents

Source. Data analysis, 2017

Results in Figure 4.1 show that 63.3% of the respondents were male while 36.7% were female. This indicates a relatively well representation of the all the genders

4.3.1.2 Designation of Respondents

Respondents were asked to indicate their designation in the Sacco, and the results presented in Table 4.1 below.

Table 4.1: Designation of respondents

Designation	Frequency	Percent
Branch Managers	5	16.7
Auditor/Accountants	7	23.3
Administrators	5	16.7
Finance Officers	2	6.7
Credit Officers	8	26.7
Marketing officers	3	10.0
Total	30	100.0

Source. Data analysis, 2017

Result presented in Table 4.1 above revealed that 26.7% of the respondents interviewed were credit officers from the various SACCOs followed by auditors/accountants at 23.3%, administrators and Branch managers at 16.7%, marketing officers at 10% and finance officers at 6.7%. This indicates that all the key position in the SACCO were well represented.

4.3.1.3 Duration worked in the organization

The respondents were asked to state how long they had worked in the Sacco. The results are shown in figure 4.2 below.

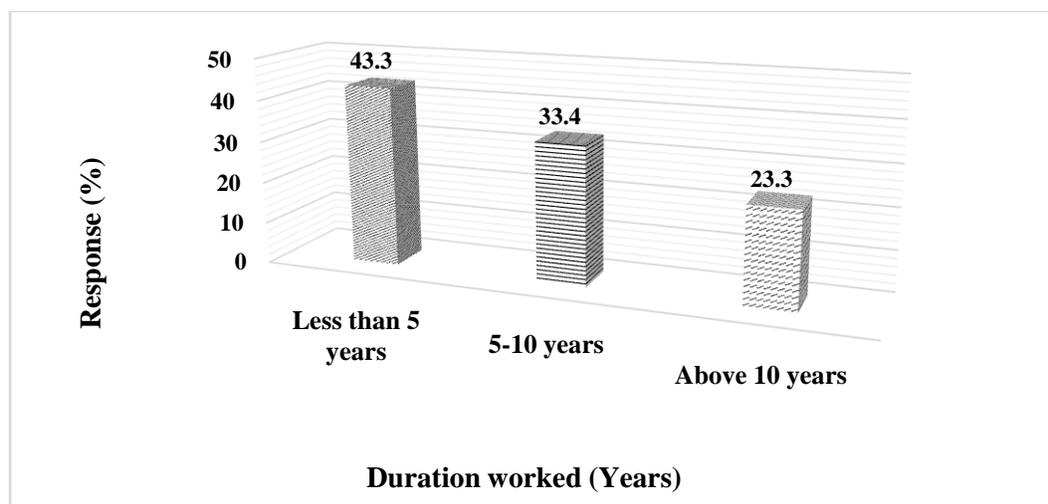


Figure 4.2: Duration respondents had worked in the SACCO

Source: Data analysis, 2017

Findings in Figure 4.2 revealed that 43.3% of the staff interviewed had worked in the SACCOs for less than 5 years, 33.4% had worked for between 5-10 years and 23.3% had worked for more than 10 years. This implies that majority of the respondents had less than 5 years' work experience and therefore had good knowledge of the operations of the SACCOs in their various positions.

4.3.1.4 Type of ownership by Deposit Taking Saccos (DTSSs)

Respondents were asked the type of ownership they had in their Saccos and the results presented in Table 4.2 below

Table 4.2: Type of Ownership by the DTSSs

Type of ownership	Frequency	Percent
Sacco shares	27	90.0
Housing Investment	5	16.7
Fosa Account	20	66.7
Members deposit	23	76.7

Source. Data analysis, 2017

From result in Table 4.2, the ownership of most SACCOs was through shares (90%) followed by members deposit at 76.7%, FOSA accounts at 66.7% through and housing investment at 16.7% . This implies that most respondents have realized that to benefit more you have to own the SACCO through acquisition of shares and patronizing other ownership in Housing Investment, FOSA Accounts, and Member deposit

SUMMARY CONCLUSION AND RECOMMENDATIONS

This chapter provides a summary of the findings, conclusions and recommendations. This section is guided by the three research objectives.

5.1 Summary of findings

Objective 1: Credit risk management practices and financial performance

The findings under this objective revealed that before loan approval, 87.6% of credit review teams in SACCOs checked the character of the borrowers, 90% checked collateral of the borrowers, 50% checked share capital and 93.3% checked borrower's financial statements. Results also show that before loan disbursement, 83.3% of credit review teams checked individual credit exposure, 80% checked compliance with internal guidelines, 93.3% checked status of existing loan facility, 86.7% checked loan repayment history, 96.7% checked completeness of the loan application. Results further show that 90% of respondent agreed to have written loan collection policy, 96.6% agreed that loan collection policy apply equally to all borrowers, 76.7% that all loans are marked for close attention and 36.7% that a loan is considered delinquent if it is one day past due.

Objective 2: Liquidity management practices and financial performance

The findings under this objective show that 33.3% of the SACCOs were fairly vulnerable to liquidity risk, 30% were vulnerable while 26.7% were vulnerable while 10% were not vulnerable. This implied that most DTSs are vulnerable to liquidity risk in varying levels. Additionally, loan processing in 53.3% of the SACCOs took less than one week while 46.7% took between 1-4 weeks. Results of findings further revealed that 73% of SACCOs used credit payment management to a great extent followed by debtors' collection management at 68%, operating cash flow management at 39% and cash conversion cycle management at 30%.

Objective 3: Compliance risk management and financial performance

Result of compliance risk management revealed high compliance to corporate governance practices was at 68.4%, financial reporting at 65%, Sacco's Society act 2008 at 63.3%, SACCOs by laws at 60%, assets quality ratios at 56.7%, statutes governing business operations at 53.3%, common laws of director's duties and liabilities at 50% and capital adequacy at 36.7%. Generally, the level of compliance was high indicating that risk can be detected early and mitigated promptly.

Correlation and regression results

Correlation analysis results show that the effect of both credit risk management practices, liquidity risk management practices and compliance risk management practices on financial performance were positive and significant. Results of the findings also revealed that the degree of association between credit management practices were higher at $r=0.762$ when compared to liquidity risk management practices at $r=0.425$ and compliance risk management practices at $r=0.346$.

From the regression analysis results, a unit increase in credit risk management practices result in 0.772 increase in the financial performance at $p < 0.01$, a unit increase in liquidity risk management practices result in 0.468 increase in the financial performance at $p < 0.01$, a unit increase in compliance risk management practices would result in 0.214 increase in financial performance at $p < 0.05$. The effect of credit risk management practices on financial performance

of DTSSs is higher when compared to liquidity risk management and compliance risk management.

5.2 Conclusions

Based on the findings this study concludes that most SACCOs had in place risk mitigation strategies which enabled risk identification, analysis, control, avoidance, minimization and elimination. This is because most SACCOs conducted credit reviews before loan approval, before loan disbursements and had in place written loan collection policies. They also had in place effective cash conversion cycle management, credit payment management, operating cash flow management and debtors' collection management and also had high compliance to the SACCOs Society laws and policies and SASRA guidelines. The study further conclude that credit risk management practices had high effect on the financial performance indicated by the higher factor of 0.772 as compared to 0.468 and 0.214 for liquidity risk management and compliance risk management respectively. In general consistent and effective management of risks would improve financial performance hence the need for SACCOs to select and use appropriate risk management practices while ensuring continuous review and control.

5.3 Recommendations

Since the various risk management practices were found to have a significant but varying influence on financial performance of Deposit Taking Saccos in Uasin Gishu, this study recommends that SACCOs should ensure cost effective and timely risk identification, measurement, prioritization and mitigation measures to ensure increased financial performance. The study also recommends that the management of licensed Deposit Taking Saccos (DTSSs) should strategically and continuously adopt effective and efficient credit appraisal, credit monitoring and debt collection practices to enhance to minimize cases of loan default so as to enhance profitability and financial performance. In this respect they should establish of a knowledgeable credit committee and credit department staff to monitor and evaluate properly the loan applications before approval and disbursement.

The study further recommends that SACCOs should establish trends of bad loans by identifying the economic sector that records higher bad loans and the factors that accounts for bad loans so as to reduce the risks in this sector. Additionally, SACCOs should aggressively mobilize members' shares and ensure retention of earnings so as to grow their capital reserves to boost capital adequacy and meet the capital reserve requirement by SASRA. This would ensure that SACCOs have sufficient funds to meet credit obligations to clients and run the day to day operational costs. Finally, SACCOs should strive to ensure full compliance with SACCOs Society Act 2008, SASRA regulations on capital adequacy, asset quality, earning rating, liquidity rating, risk management, board composition and quality,

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