
**RISK MANAGEMENT ON MEMBER ADVANCEMENT OF LICENSED DEPOSIT
TAKING SACCOS IN NAIROBI CITY COUNTY, KENYA**

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Abstract

The purpose of the study was to examine risk management on member advancement of licensed deposit taking Saccos in Nairobi County, Kenya. The study adopted a descriptive cross sectional survey design, where both quantitative and qualitative approaches were applied. Questionnaires and semi-structured interviews were used in data collection. Email (internet) and drop and pick methods were also used. Collected data was organized according to the research objectives and hypotheses using statistical package software for social sciences (SPSS). The sample had 39 respondents out of a population frame of 42 participating licensed deposit taking Saccos in Nairobi County. They comprised of the chief executive officers, the deputies and the departmental heads from the sampled licensed deposit taking Saccos. Data was analyzed using descriptive and inferential statistics. Descriptive statistics included mean, standard deviation, frequencies and percentages. Inferential statistics included correlation analysis and regression analysis. The results indicated that risk management had a positive and significant relationship with Member advancement of deposit taking Saccos in Nairobi city county Kenya. The study recommended that deposit taking Saccos adopt proactive risk management approach that enables risks to be detected well in advance. If risks are discovered at a later stage, deposit taking Saccos would have little time to address the problems. Further, a comprehensive and dynamic approach of risk management would enable deposit taking Saccos to maintain a dynamic approach in the management of risks resulting from the external environmental factors. For successful mitigation of risks, it is recommended that deposit taking Saccos detect and introduce risks management systems in their Risk Management Policy to build credibility.

Key Words: *Members Advancement, Risk Management, Cooperative Societies*

Introduction

Deposit taking Saccos (referred to as Credit Unions in the European countries) worldwide provide access to sustainable financial services while simultaneously helping depositors gain better access to financial markets (Alhadab, Clacher & Keasey, 2016). They are developed to meet the basic human needs of deposits and borrowing methods without taking risks (Harelimana & Gasheja, 2016). Today, deposit taking Saccos have important objective of empowering their depositors Socio-Economic Status all over the world. In Western Europe there are around 11,000 communal and regional Deposit taking Saccos with over 56, 000 outlets, 33

million strong depositors and a staff of more than 400,000. Their market share is 17 percent of Deposits, ranking third after the commercial and savings banks (Burger & Zellmer, 1995).

Birchall (2004), in a Geneva international labor organization (ILO) conference stated that deposit taking operations record good performance and financial services such as deposits and loans, attract consistent flow of funds and spread-out risk. They may not require financial assistance from any external funding. The mutual agreement, in which depositors lend, borrow, and agree to insure each other is sufficient, the level of risk is relatively low as they invest within their internal operations (Johnson & Sherraden, 2006). In Africa, Credit unions are known as (SACCOs) to emphasize deposits before credit, an added value of financial advancement that deposit taking Saccos bring to the depositors (Churk, 2015). They offer the same financial products as banks but are categorized not for profit institutions and operate in cooperatives. However, in their growth path in the past two decades, Saccos faced higher credit, financial, liquidity and technological risks as compared to other financial institutions like commercial banks.

Among all Cooperative Societies, Gyanendra (2022) observed that risk management was paramount in addressing long-term solvency risk, credit default risk, liquidity risk, investment risk, governance system risk and transparency risk. In addition, Khanal (2020) observed that Credit risk management in Cooperatives seemed unsatisfactory. The board should select and give emphasis to an appropriate credit risk management system.

In Kenya, Magiri (2017) observed that Saccos faced many risks that require modern system of risk management to enable them to mitigate and carry their businesses to the satisfaction of members. Such risks include pure risk, speculative risk, fundamental risk due to inflation, operational risk and financial risk. Others include fraud, misappropriation of funds, strategic risk and governance risks, technological risk due to rapid change in technology, credit risk, and lack of funds, competition and other risks that face organizations in the same industry are included.

Statement of the problem

Despite the effort made by the cooperative stakeholders to improve member advancement, Deposit taking Saccos continued to experience shortage of funds for on lending to the Sacco members. This is due to the financial liquidity gap that existed between the available funds collected as member deposits and the amount of loans required by members as borrowings for advancement. The situation curtails the main deposit taking Sacco business objective of collecting deposits and lending the same to members as loans. WOCCU (2017) indicated that there were several determinants that influence deposit taking member advancement. SASRA (2017) annual report indicated outstanding members deposits at Kshs 272.57 Billion for the year ended 31st December 2016, compared to Kshs 237.44 Billion for the year ended 31st December 2015; The credit portfolio outstanding balance at Kshs 297.6 Billion for the year ended 31st December 2016, compared to Kshs 258.18 Billion for the year ended 31st December 2015. The total membership for the year ended 31st December 2016 was 3.1 Million compared to 2.9 Million, for the year ended 31st December 2015. Magiri (2017) observed that SACCOs face technological risks due to rapid change in technology, credit risk, and lack of funds, competition and other risks that face organizations in the same industry. The risks Saccos were exposed to, did not match the number of years a Sacco had been operating, the membership, or the deposit base.

Various studies were conducted on risk management in Saccos in Kenya. For instance, Brunnermeier (2014) conducted a study on risk management in deposit taking Saccos; O' Donnel and Keeney (2009) analyzed the behavior of first-time depositors in relation to the risk inherent in deposit taking business; and Magiri (2017) examined risk management in savings and credit cooperative societies. However, studies in this field have not shown how risk management affects members' advancement of deposit Taking Saccos. The study sought to investigate the effect of risk management on member advancement of licensed deposit taking Saccos in Nairobi County, Kenya.

The study was guided by the following hypotheses:

H₀₁: Risk management has no significant effect on member advancement of licensed deposit taking saccos in Nairobi city county, Kenya.

H_{A2}: Risk management has significant effect on member advancement of licensed deposit taking saccos in Nairobi city county, Kenya.

Theoretical framework

This study was anchored on financial restructuring and physical image theory. Boomgard and Angell (2002) alluded that the front office services of Deposit taking imply significant structural changes to their financial statements. On the balance sheet, savings deposits are used to replace external bank credit, institutional capital replaces member shares, and liquidity reserves are set aside to meet normal withdrawal requests. On the income statement, interest rates on loans are set to cover all related expenses while the interest rates on deposits and shares are set to provide member owners with a real return on their capital.

With the emphasis on deposits mobilization in the late 1980s and 1990s, there was a requirement to compare the loan to share linkages of the past and replace member shares with institutional capital, a more secure source of risk capital (Esho et al., 2005). This change in strategy enabled members to borrow money without share purchase, but it created a new challenge on how to generate sufficient institutional capital to replace the shares that were eliminated. This challenge was overcome by pricing loans to cover expenses and paying attractive rates on deposits.

Brunnermeier (2009) explained institutional capital as all permanent capital reserves such as legal reserves, undivided surplus, and retained earnings. Institutional capital is a permanent, non-withdrawable source of capital that is used to cover all types of operating risks and losses. To pay attractive deposits rates and build institutional capital through earnings, Deposit taking Saccos also had to raise the subsidized interest rates on loans for increased advancement.

Pona and Mukherjee (2010) noted that Deposit taking Saccos that once depended on donor funding for the expansion of their loan portfolios, also faced many physical limitations. Because some of these deposits taking Saccos did not mobilize deposits, there was no need for spacious and comfortable facilities where members could deposit and withdraw their deposits without standing in long lines. In addition, there was no space for strongboxes or safes, and the security systems were totally inadequate.

In relation to the study, the successful attraction of new depositors requires adequate space, safety, and a professional image. Therefore, concurrent with the ongoing financial restructuring, significant remodeling and improvement of the physical facilities were also necessary. The attractive public image of the physical infrastructure of an organization does much to present an image of professionalism (Brown & O'Connor, 2001). This theory is closely linked to the

relationship between risk management and member advancement since spacious and comfortable facilities presents a professional image which is conducive for risk mitigation.

Conceptual framework

The conceptual framework, Figure1, illustrates the perceived link between the independent variable (risk management) and the dependent variable (member advancement).

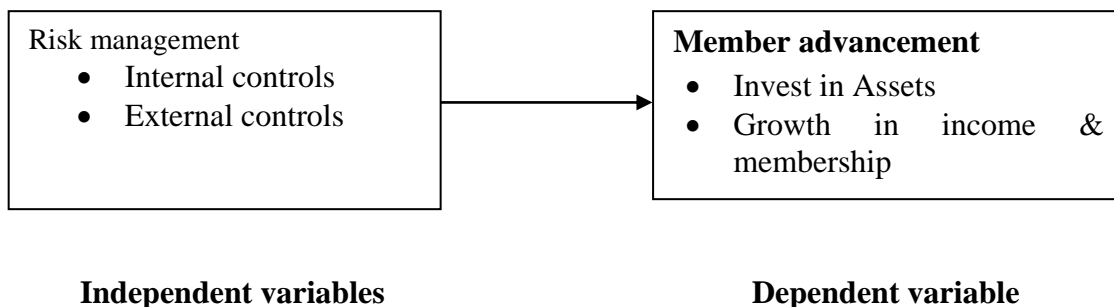


Figure 1: Conceptual Framework

Empirical Review

Risk management and member advancement

Magali (2013) postulated that the risk of loan default is not only influenced by borrowers but also the managements team decisions. The study did not explain to which extent the defaults affect the member advancement. Servon and Kaestner (2008) posits that deposit taking Saccos address member demands by mobilizing funds and granting credits to members; however, they have not been able to accumulate deposits to build institutional capital. This proposition was also supported by Hollis and Arthur (2009) on assessment of financial practice as determinant of growth in Saccos. Both findings did not explain the magnitude of inadequate finances but concluded that institutional capital affect Sacco member advancement. In extension they conclude that Sacco non-withdraw able capital cushion losses and impairment of members savings.

Brunnermeier (2014) conducted a study on risk management in deposit taking Saccos. The research aimed to identify the risks exposed to Saccos and the main contributors of these risks. The study also focused on establishing effective measures to manage these risks. It revealed a number of risks which include pure risk, speculative risk, fundamental risk due to inflation, operational risk and financial risk. Others include fraud, misappropriation of funds, strategic risk and challenges in governance. All these require proper methods of mitigation. Besides the internal risks that deposit taking Saccos are exposed to, there are also technological risk, credit risk, competition risks that are within the Sacco subsector. The study revealed that inadequate policies and procedures, internal audits, internal controls and noncompliance with legal and regulatory practices contributed further to the existing risks. It showed the various measures that could be implemented for effective risk management. These are risk identification, risk assessment, risk transfer, risk avoidance and effective budgetary controls.

Brown and Davis (2012) studied the organizations that have not offered savings deposits and have only received deposits through payroll deductions which concluded that Sacco decisions to accept over the counter cash deposits attracts a new series of risks. Risk management demands

internal controls that provide security measures and establish procedures for common transactions, while staff sensitization is another element of combating risk. A Portfolio Access Line of lending allows a borrower to take a loan providing any form of acceptable security as collateral, at the lowest cost offering a better satisfaction for member liquidity needs. It allows a borrower to Satisfy his financial needs without disposing assets and potentially disrupting his long-term investment plan; and enjoy greater liquidity, for current and future needs.

O' Donnel and Keeney (2009) analyzed the behavior of first time depositors in relation to the risk inherent in deposit taking business, He found out that they are usually motivated to start savings deposits by a need for security and a desire to prevent the risks inherent in depositing in cash or alternative forms. These depositors always look for liquid products with low minimum balances. First time depositors remain loyal to the deposit taking Sacco for as long as the Sacco remains secure and provides risk mitigation methods. This logic is consistent with the observations that the many small accounts of low-income depositors provide a stable source of finance. Experienced depositors, on the other hand, open accounts with big balances in other Saccos as an alternative method to mitigate risk. Their main concerns are also security and convenience. Deposit taking Sacco risk programs have proved that low income and poor people significantly increase their deposits in financial form if they are provided with safe and convenient places to deposit their funds (Walliman, 2011).

Member Advancement

Branch (2013) indicated the growth witnessed in credit unions since they were started; Growth in savings volume and in the number of members and clients served. The fact that total deposits grew many times as fast as the number of members suggests that the credit unions have been successful both in attracting new members and in deposit accumulation. The dramatic increase in total deposits demonstrates that the institutions have been successful in building the trust of new and existing savers. Further growth is seen when an institution establishes the financial disciplines necessary to build a sound institution where savers entrust their deposits. Therefore, credit unions hold to the principle that internally generated savings provide an independent and sustainable supply of funds that are invested in the local community (Branch & Klaehn, 2001).

Kempton et al. (2000) viewed Savings and credit as fundamental to sustainable economic development. They are the most frequent source of funding for microenterprise startups and expansion. Voluntary savings enable households to smooth consumption in the face of uneven income flows, to accumulate assets for the future, to invest in education, and to better prepare for emergencies. Onchangwa (2012) conducted a study to establish whether Savings and Credit Cooperative Societies (Saccos) have any effect on members' investment culture in Kenya. He established that investment plays an important role in sustaining growth and development of the country. High rates of investments depend on high rates of savings. They also argue that a high saving economy accumulates assets faster and thus grows faster than a low saving economy.

ACCOSCA (2011) classified Saccos as vehicles for economic growth through savings and investment. Moreover, the government of Kenya recognizes cooperatives as the major contributor to national development with the country's population approximately 43 million. Whether in developing, transitioning, or developed countries, the purpose of a credit union remains the same: to provide members with financial services to improve their economic and

social wellbeing through asset accumulation and income generation (Lyons & Neelakantan, 2008).

In Kenya, the impact of licensing front office operations, in the year 2011 witnessed the continued growth of the sector on various key fronts such as membership and advancements in technology; thus, facilitating service delivery and increased number of branches. Key definitive milestones in efficiency and service delivery have profoundly transformed the sector both in the short and medium term. Saccos comprise over 50% of all cooperatives in Kenya and as financial institutions they play a critical role of financial intermediation in the country's financial sector. The Sacco sub sector comprises of large Saccos, some of which have a total asset base of over Kshs. 15 billion to the very small ones that have under Kshs. 10 million in assets and are well spread across the country. Deposit taking Saccos accumulated assets to the tune over 171 billion (Atkinson, 2008).

SASRA reports (2013) revealed that all the counties registered growth in branch network. The branch distribution reflected the level of economic activities across the regions. Deposit taking Saccos embraces the use of technology to deliver services to members. The most notable is the connectivity to ATMs and mobile delivery channels. They connect to the Cooperative Sacco Link network and several others hooked on the Pesa point ATM network. The use of mobile phones to deliver financial services has seen software vendors in the Sacco subsector partner with the telecommunications companies to integrate mobile solutions to their core systems (Manyara, 2003).

This significant development enable Sacco members withdraw or deposit money into the FOSA account, make enquiries on the accounts, get notifications on their loans as well as pay for bills conveniently without having to travel to Fosa premises. Saccos in Nairobi County estimated at 42 accounts for over 70% of the total assets and deposits in the entire subsector. This is mainly because they are salary based Saccos providing a stable source of deposits and market to lend. The same trend is replicated of the deposits and assets (FSD, 2012).

This trend is however reversed when it comes to membership with Nairobi Saccos accounting for less than 40% of the total membership. Based on the current performance, the deposit taking Saccos have the largest market share accounting for over 75% of the deposits and total assets for the subsector. These Saccos also comprise the large Saccos in terms of key indicators including membership, assets, and deposits. The Kenyan Sacco sector has been observed to contribute significantly to the total financial industry and consequently the economy. It contributes to over forty five percent of the nation's Gross Domestic Product and Contributes to over 31% of the national savings, supporting over 60% of the nation's population either directly or indirectly.

Research Methodology

The study adopted a descriptive cross sectional survey research design. A descriptive cross-sectional survey collects data to make inferences about a population of interest and is described as snapshot of the populations from which researchers gather data. The population of interest was composed of all licensed deposit taking Saccos in Nairobi County registered by the Sacco societies regulatory Authority (SASRA, 2014). This was a total of 42 deposit taking Saccos which were categorized in different sizes according to number of members in each Sacco. There were other licensed deposit taking Saccos registered with the Sacco societies regulatory authority but excluded from the population because they operate in the rural areas and in other counties outside Nairobi and their inclusion would conflict the objectives of the study.

Three Saccos had been excluded from the sampling frame as they had only been issued with provisional registration for noncompliance with the requirements of capital adequacy. As a result of the small sample of the licensed deposit taking Saccos in Nairobi County (39), It was possible to collect data from the entire population and hence a census inquiry was used. The sample comprised 39 respondents which is 92% of the target population. This indicated that the sample was sufficiently large even for descriptive studies for which the minimum sample size is 10% (Saunders et al., 2007).

Table 1: Sample Size

Size of Sacco	No of Saccos	Sample Size
Large	4	4
Medium	18	18
Small	20	17
Total	42	39

The study used a questionnaire and a research interview guide to collect primary data. The Chief executives, the Deputies and the department heads were the key informants in each Sacco as they were deemed to possess specific information of Sacco financial empowerment on member advancement. The interview guide was used for in-depth qualitative data collection on various themes in the study. These two instruments were administered concurrently and only one respondent was interviewed in each Sacco. The research instruments were pre-tested using a sample size of five respondents as per recommendation by Mugenda and Mugenda (2004) who observed that a successful pilot study uses 1% to 10% of the actual sample size. Both reliability and validity of the research instruments were examined.

Quantitative data was entered and analyzed by both descriptive and inferential statistics using Statistical Package for Social Sciences (SPSS) version 21 and Microsoft Excel. Descriptive analyses were conducted to present the main characteristics of the sample. Inferential statistics included regression analysis and correlation analysis. Regression analysis was used to analyze the contribution of each independent variable to the dependent variable and to test the hypotheses. The following represents the regression equation according to the general model used to represent the relationship between the dependent variable (Y) as a linear function of the independent variable (X) with (e) representing the error term.

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

Where: Y= Member Advancement; X_1 = Risk management; β_0 = Constant; β_1 regression coefficient to be estimated; e =Error term reflecting other factors

Research Findings and Discussion

The researcher issued 42 questionnaires to the Chief Executive Officers of the deposit taking Saccos in Nairobi County. All the 42 questionnaires were filled in by the Chief Executive officers, their deputies and the department heads and returned. This represents a 100 per cent response rate which was excellent and representative. Bryman and Bell (2011) state that a response rate of 50% is adequate for analysis and reporting, 60% is good and 70% is very good and above 80% is excellent. The persistent and personal calls to the respondents informing them of the study intent and personally administering questionnaires by the researcher and research assistants ensured good response rate.

Background Information

The results indicate that majority (67%) of the respondents were male, and 33% were female. These results were consistent with the findings of Mugambi, Njeru and Memba (2016) where they noted that alignment with one third rule of the Kenya Constitution brings about gender balance and good corporate governance in the institutions. The findings established that men were active in the formal sectors while women were active in the informal sectors and gave a ratio of 28: 14.

The results indicated that the majority (93%) of the respondents were the chief executive officers and only 7% of the respondents were the rest of the management team, either the deputy chief executive officers or the departmental heads. These results indicate that the chief executive officers, positioned at the top level of management in the organization, have wider knowledge and skills to oversee the internal operations and bind the business with external stakeholders.

The results found that the majority (54.8%) of the respondents had worked for more than 6 years; 42% had worked between 4-6 years, while a small percentage, 2.4%, worked for 1 year. The findings imply that most chief executive officers had more than 6 years of experience. This means that the chief executive officers make remarkable contributions to the performance and growth of the organizations. This aligned with the 2016/2017 performance contracts of the public institutions.

The findings indicate that 50% of the respondents had a bachelor's degree, 43% of the respondents held Masters, while 7% of the respondents held Diploma. These results indicate that many of the respondents in the study were degree holders. Therefore, they had the requisite academic background to enable them make deposit taking decisions as well as complete the questionnaire satisfactorily. These findings were consistent with those of the Sacco Societies Act (2008) which recommends that Deposit taking Saccos be run by professionals.

Table 2: Gender distribution

Gender	Frequency	Percentage
Male	28	67
Female	14	33
Total	42	100
Position		
Chief executive officers	39	93
Others	3	7
Total	42	100
Number of years served		
>6	23	54.8
4-6	18	42.9
<1	1	2.4
Total	42	100
Level of education		
Masters	18	43
Degree	21	50
Diploma	3	7
Total	42	100

Risk Management

This study sought to establish on which year the institutions opened doors for front office services test and descriptive statistics were performed to determine the influence of risk management on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

The Year the Institutions Opened Doors for Front Office Services

The researcher performed tests on the year the institutions opened doors for front office services as a Measure of how the deposit taking operations have been mitigated against risk, and to examine whether data collected was adequate and appropriate for inferential and other statistical tests. The data was regarded appropriate for statistical analysis if the frequency is greater than 1; and particularly for the Saccos that started operating in the year 2008 when the Sacco Societies Act was enacted.

Table 3 findings indicated that prior to the year 2008, some of the Saccos offered front office services but without proper financial framework. With the creation of the Sacco societies Act, 2008 and the Sacco regulation, 2010; all Sacco Societies that were operating Front office services were required to apply for licenses from the regulator and meet the prudential regulatory framework. Saccos that opened doors for deposit taking services in the year 2008 and after, met the requirements of the regulatory framework for licensing and supervision. They also met requirements for adequate physical layout of space, sufficient human resources, and simple streamlined procedures.

The results revealed that there was high frequency of Saccos that opened doors for front office services before and after the creation of the Sacco regulatory Authority for licensing and supervision (Brunnermeier, 2009). The year 2004 indicated the highest frequency of 7 saccos that opened doors for deposit taking with a percentage of 16.7. This was the period before the enactment of the Sacco Act. The year 2011 which is the year after the coming of the Regulator, indicates the highest frequency of 6 saccos that opened doors for deposit taking with a percentage of 14.3. This confirmed that the application of regulatory framework in supervision of deposit taking financial institutions was a first step in mainstreaming Sacco societies into the formal inclusive financial system by promoting best practices in the conduct of Sacco business (Byrne, 2009). Therefore, these results provide a justification for further statistical analysis to be conducted hence the statements were retained for analysis.

Table 3: The year the institutions opened doors for front office services

Year	Frequency	Percent
1989	2	4.8
2001	1	2.4
2002	1	2.4
2004	7	16.7
2005	4	9.5
2006	3	7.1
2007	4	9.5
2008	4	9.5
2009	3	7.1
2010	2	4.8

2011	6	14.3
2012	4	9.5
2015	1	2.4
Total	42	100.0

Descriptive Results on Risk Management

The study sought to assess the effect of risk management on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya. Table 4 showed that 100% of the respondents agreed that operational risks can undermine the financial position of deposit taking Sacco if not adequately mitigated, 100% of the respondents agreed that Deposit taking Saccos operate in a competitive world and must follow business practices to protect Assets against Risks, 97.6% of the respondents agreed that The dynamic approach of risk management allow Deposit taking Saccos to face new risks and to introduce them in the risk management policy, 100% of the respondents agreed that A comprehensive approach to risk management reduce the risk of loss, build credibility and create opportunities for growth among members, 100% of the respondents agreed that Internal controls in a deposit taking Sacco are part of the control system that ensures accuracy of records and efficient operations, 100% of the respondents agreed DTS have adopted a new approach to Risk management.

The mean score for responses for this section was 4.424 which indicated that majority of the respondents agreed that risk management influence member advancement of licensed deposit taking Saccos in Nairobi City county, Kenya; hence giving justification of its inclusion as a key driver of member advancement. The standard deviation gives the variations of the responses from the mean. It provides an indication of how far the individual response to each factor varies from the mean, the average standard deviation of 0.492 on all the statements indicates that the respondents were moderately distributed.

Table 4: Responses on Risk Management

Opinion Statement	SA(%)	A(%)	D(%)	SD(%)	DK(%)	Mean	Std. D
Operational risks can undermine the financial position of DTS if not adequately mitigated.	23(54.8)	19(45.2)	0(0)	0(0)	0(0)	4.548	0.504
DTS operate in competitive world and must follow business practices to protect assets against risks	19(45.2)	23(54.8)	0(0)	0(0)	0(0)	4.452	0.503
The dynamic approach of risks allows DTS to face risks in line with Risk management policy	21(50)	20(47.6)	0(0)	1(2.4)	0(0)	4.390	0.586
A comprehensive approach to new risks reduces the risk of loss, build credibility and creates opportunities.	16(38.1)	23(61.9)	0(0.0)	0(0)	0(0)	4.381	0.491
Internal controls in DTS are part of the control systems that ensure accuracy of records and efficient operations	16(38.1)	26(61.9)	0(0)	0(0)	0(0)	4.381	0.491
DTS have adopted new approach to Risk management	16(38.1)	26(61.9)	0(0)	0(0)	0(0)	4.390	0.494
Average						4.424	0.492

Member advancement

This was the dependent variable of the study on which socio-economic conditions for investing in assets for future test, and descriptive statistics were performed to determine the influence of independent variables on member advancement of licensed deposit taking Saccos in Nairobi Kenya.

Improve Socio-economic conditions by investing in assets for the future

The researcher performed tests on improving Socio-economic conditions by investing in assets for the future as a Measure of the percentage of growth in savings volume and in the number of members and clients served and also to examine whether data collected was adequate and appropriate for inferential and other statistical tests. The data was regarded appropriate for statistical analysis if the total deposits grew many times as fast as the number of members.

Table 4.18 findings indicated that members save and borrow credit from Saccos to improve their socio-economic conditions by investing in assets for the future, which gave 100 percent response. The findings agreed with the views of Kempton et al. (2000) that credit unions hold to the principle that internally generated savings provide an independent and sustainable supply of funds that can be invested in the local community. They are fundamental to sustainable economic development and the most frequent source of funding for microenterprise startup and expansion.

Table 5: Improve socio-economic conditions by investing in assets for the future

Opinion Statement	Frequency	Percentage
Improve socio/economic conditions	42	100

Descriptive Results on member advancement

Descriptive analysis was performed to establish the respondents' perception concerning member advancement of licensed deposit taking Saccos in Nairobi Kenya. Table 4.19 findings indicate that 100% of the respondents agreed Credit unions must make a surplus to build capital reserves, an essential element for meeting international standards for capital adequacy and solvency, 97.6% of the respondents agreed Member-owners have contributed their own share capital with the expectation of receiving access to the financial products and services offered, 100% of the respondents agreed Members expect to receive a real dividend yield greater than inflation, 97.6% of the respondents agreed Credit unions hold to the principle that internally generated savings provide an independent and sustainable supply of funds that can be invested in the local community, 100% of the respondents agreed Savings and credit are fundamental to sustainable economic development, 97.6% of the respondents agreed Voluntary savings enable households to smooth consumption in the face of uneven income flows, to accumulate assets for the future, to invest in education, and to better prepare for emergencies (Kempton & Viren, 2005).

The mean score responses of 4.361 indicated that majority of the respondents exhibited high responses on member advancement. This implies that risk management is a key factor in member advancement of licensed deposit taking Saccos in Nairobi Kenya. The standard deviation gives the variations of the responses from the mean. It provides an indication of how far the individual response to each factor varies from the mean. The average standard deviation of 0.523 on all the statements indicates that the respondents were moderately distributed.

Table 6: Responses on member advancement

Opinion Statements	SA(%)	A(%)	D(%)	SD(%)	DK(%)	Mean	Std. Dev
Credit unions must make a surplus to build capital reserves for meeting international standards for capital adequacy	18(42.9)	24(57.1)	0(0)	0(0)	0(0)	4.429	0.501
Member-owners contribute share capital expecting to receive access to the financial products	11(26.2)	30(71.4)	0(0)	0(0)	1(2.4)	4.214	0.565
Members expect to receive a real dividend yield greater than inflation	11(26.2)	31(73.8)	0(0)	0(0)	0(0)	4.262	0.445
Saccos hold to the principle that internally generated savings provide sustainable funds for investment	20(50.6)	20(47.6)	0(0)	1(2.4)	0(0)	4.428	0.590
Savings and credit are fundamental to sustainable economic development	20(47.6)	22(52.4)	0(0)	0(0)	0(0)	4.476	0.505
Voluntary savings enable households to smooth consumption in the face of uneven income flows	16(38.1)	25(59.5)	0(0)	1(2.4)	0(0)	4.357	0.532
Average						4.361	0.523

Inferential statistics

The inferential statistics comprised of correlation analysis and regressions analysis. The correction analysis shows the relationship between the independent variable and the dependent variable. The regression analysis shows the weight of the relationship between the independent variables and the dependent variable.

Correlation Results

The results aimed at determining the degree of association between two or more variables. According to Zikmund (2003) correlation exists between two variables when one is related to the other and its calculation gives correlation coefficient statistics (r) whose values lies between -1 and +1. Interpretation of the correlation matrix followed the yard stick presented by Willis (2009) which stated that r of 0.9 to 1 shows very high correlation, 0.7 to 0.89 shows high correlation, 0.5 to 0.69 shows moderated correlation, 0.3 to 0.49 shows low correlations and 0.0 to 0.30 shows little, if any correlation.

Table 7 further showed a strong positive correlation of 0.827 between the risk management and member advancement of Deposit taking Saccos. The p value of 0.000 was obtained indicating that the relationship is significant; Implying that Risk Management is a strong determinant of member advancement of Deposit taking Saccos.

Table 7: Correlation Matrix

		Member advancement	Risk Management
Member advancement	<i>r</i> -Pearson correlation Sig.(2-tailed)	1.000	
Risk Management	<i>r</i> - Pearson correlation Sig.(2-tailed)	0.827 0.000	1.000
	Sig.(2-tailed)	0.000	

Regressions Results

The researcher used bivariate and multi regression analysis to determine the linear relationship between the dependent and independent variables. The study hypothesis was given as follows:

H₀₁: Risk management has no significant effect on member advancement of licensed deposit taking Saccos in Nairobi city county, Kenya.

H_{A1}: Risk management has significant effect on member advancement of licensed deposit taking Saccos in Nairobi city county, Kenya.

The Regression analysis was run to test the above hypothesis which established that the coefficient of determination R^2 was 0.684 meaning that risk management explains 68.4% of the variance in member advancement of deposit taking Saccos in Nairobi County, Kenya; as shown in table 4.30. The correlation coefficient (R) of 0.684 indicates the strength of association between the observed and the predicted values and satisfies that risk management is a strong predictor of member advancement of deposit taking Saccos.

Table 8: Risk Management and Member Advancement Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.827	0.684	0.681	0.60841

a. Predictor: (Constant), Risk Management

Further, regression analysis slope coefficient representing the influence of the Risk management and member advancement was tested. The t- statistic was used to test the hypothesis on the significance of slope coefficient (β) at 5 per cent level of significance. The results of Table 4.31 show that linear regression model of Risk management on member advancement was $Y = \beta_0 + \beta_1 X_1 + \varepsilon$ which becomes $RM = 0.586 + 0.806 X_1$. The beta factor indicates the effect of Risk management on member advancement which has been supported by the higher figure of $t = 14.557$ at $P = 0.000$ at 5% level of significance. The null hypothesis was rejected, and alternative hypothesis accepted that risk management significantly determine member advancement of deposit Taking Saccos in Nairobi City County, Kenya.

Table 9: Risk Management and member advancement regression coefficients

Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	β	Std. Error	Beta		
(Constant)	0.586	0.195		3.005	.003
Risk management	0.806	0.055	0.827	14.557	.000

a. Dependent Variable: Risk Management

Further ANOVA (F-test) was run to find the overall significance of the regression model (goodness of fit) at 5% level of significance. The findings of Table 10 indicated that the value of computed F statistic was 69.977 with a P-value of 0.000 at the 5% level of significance. The null hypothesis was rejected since the probability value (P value) of obtained F was significantly low ($P < 0.005$). Thus, the model fit is acceptable implying that there was a significant positive linear relationship between risk management and member advancement of deposit Taking Saccos in Nairobi County Kenya.

Table 10: Risk Management and Member Advancement ANOVA

Model	Sum of Squares	df	Mean square	F	Sig.
Regression	44.397	1	44.397	69.977	0.000
Residual	25.378	40	0.63445		
Total	69.775	41			

a. Dependent Variable: Member Advancement

b. Predictor: (Constant), Risk Management

Discussion of key findings

The study established a mean of 3.350 on Risk management meaning that majority of the respondents were in agreement that Risk management affects Member advancement. The coefficient of correlation of 0.827 was found indicating a strong positive correlation between risk management and Member advancement. Coefficient of determination of 68.4% indicates the proportion of changes in Member advancement that were explained by Risk management. These findings indicate that risk management was a strong driver of Member advancement of deposit taking Saccos in Nairobi City County, Kenya. The findings are consistent with the results of Brunnermeier (2009); who explained the internal and external components of Risk management which quite often affect the operations of an organization (Byrne, 2009).

Conclusions and Recommendations

Risk management had a positive and significant relationship with Member advancement of deposit taking Saccos in Nairobi city county Kenya ($t = 5.585$, $P\text{-value} = 0.000 < 0.05$). The Risk management Policy specifies the procedures and guidelines followed in the management of risk. Risk, if not properly mitigated for prevention, may bring down the operations of a Sacco. Good governance enables society to adapt to new situations and introduce new risks in its risk management policy.

A proactive Risk Management approach is where risks are assessed and managed before they appear. This approach reduces the occurrence of risk of loss to the Sacco operations. It is recommended that deposit taking Saccos adopt a proactive risk management approach that enables risks to be detected well in advance. If risks are discovered at a later stage, deposit taking Saccos will have little time to address the problems, and this may not be adequate. Further, a comprehensive and dynamic approach of Risk Management enables deposit taking Saccos to maintain a dynamic approach of the management of the risks resulting from the external environmental factors. For successful mitigation of risks, it is recommended that deposit taking

Saccos detect and introduce new risks in their Risk Management Policy to build credibility among members.

Areas for further research

This study focused on the effect of risk management on member advancement of licensed deposit taking Saccos in Nairobi County. The results indicated that risk management explains 68.4% of the member advancement of licensed deposit taking Saccos in Nairobi County. Therefore, further studies should be conducted on other factors affecting member advancement of licensed deposit taking Saccos in Nairobi County. In addition, the study was limited to Nairobi County and hence the findings cannot be generalized to other Counties in Kenya, due to differences in socio-demographic and economic factors from one County to another. Therefore, similar studies should be conducted to cover other Counties in Kenya.

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