

**EFFECT OF FINANCIAL EMPOWERMENT ON
MEMBER ADVANCEMENT OF LICENSED DEPOSIT
TAKING SACCOS IN NAIROBI CITY COUNTY, KENYA**

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**Effect of Financial Empowerment on Member Advancement of
Licensed Deposit Taking Saccos in Nairobi City County, Kenya**

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

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DEDICATION

This thesis is dedicated to my husband Murungi Kibanga and children Rosalind Karimi, Rachel Gakii and Kenneth Mwirigi; who showed a lot of understanding and support even when I abandoned my house chores to concentrate on the study.

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LIST OF ABBREVIATIONS AND ACRONYMS

ACAL	Alpex consulting Africa ltd
ACOSCA	African cooperative savings and credit association
BOSA	Back office systems administration
CREDIT UNION	Name used for Saccos in developed countries
DTS	Deposit taking Saccos
FI	Financial institutions
FOSA	Front office systems administration
FSD	Financial sector deepening
GDP	Gross Domestic product
ILO	International labour organization
MOCD&M	Ministry of cooperative development& marketing
PEARLS	Protection, Effective Financial Structure, Asset Quality, Rates of Return and cost, liquidity, signs of growth
SACCO	Savings and credit cooperatives
SASRA	Sacco societies regulatory authority
VISION 2030	Strategic plan for the growth of Kenyan economy into middle level income generating
WOCCU	World Council of Credit Unions
WSG	World council service group

DEFINITION OF TERMS

Empowerment: Refers to steps made to increase the degree of independence and self-determination in individuals to enable them to represent their desires in a responsible and self-determined way, acting on their own capacity. It is the method of becoming stronger and more confident, particularly in controlling one's life and claiming one's rights. It helps individuals to overcome their condition of powerlessness and lack of influence, and to recognize and use their resources. (Julian Rappaport, 1981).

Financial Empowerment: This is the transfer of personal money power (financial independence) to a person. It is a step of advancing from financial instability to a level of financial stability through investment and it is also the access to financial services to the less advanced persons (Broun, 2014). This is a considered aspect to economic advancement, through growth which raises income levels of the individual (Eric & Kannan, 2018).

Sacco Membership: It is attained when an individual is registered to membership after admission in accordance with the Sacco by-laws. Sacco membership is built on the basis of common bond, where individuals working under one or related employer pool their resources together with a view to building a pool from where individuals borrow loan facilities with relatively low interest rates as compared to commercial banks (Ishengoma, 2016).

Saccos: Are depositor-owned financial organizations that offer deposit and credit services to their depositors, with variety of financial service products. The purpose of deposit taking Saccos is to provide depositors with financial services to advance their economic and social status through asset accumulation and income growth (Deotto & Fontana, 2017).

Financial Services: Are the economic services provided by the financial institutions, which encompasses a broad range of institutions that manage money, including deposit

taking Saccos, banks, insurance companies, stock brokerages, investment funds and some government sponsored agencies. Financial Services relates to all forms of financial or market intermediation including the offering of financial products (Gombe, Kauffman & Webber, 2018).

Credit portfolio Administration: Refers to a set of principles, tools, processes that are based on the Administration of Credit Portfolios (collections of credit assets). The main characteristic of credit portfolio Administration activities is that Credit Risk is assessed and Administered not on a standalone but in a portfolio setting (Fernandes, 2014).

Risk management- It is the forecasting and evaluation of financial risks together with the identification of procedures to avoid or minimize their impact. It can also be the identification, evaluation, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability or impact of unfortunate events or to maximize the realization of opportunities.(ISO 31000).

Regulatory Environment: It is a framework that enhances sound financial and business management practices for deposit taking Saccos to promote transparency and accountability in the Sacco subsector. It sets prudential regulation that acknowledges the unique financial intermediation function deposit taking Saccos play in the economy. (Alhadah et al.,2016).

Member Advancement: This is broadly classified as access to credit and financing by Sacco members to ultimately raise their standards of living by investing in assets for the future. It is the pooling together of member deposit resources which are subsequently borrowed by them for both the provident and advancement purposes (Tanaomi & Asaadi, 2017).

ABSTRACT

This thesis examined the effect of financial empowerment on member advancement of licensed deposit taking Saccos in Nairobi city County, Kenya. The thesis objectives were; to examine the effect of accessing financial services on member advancement, to evaluate the effect of credit portfolio administration on member advancement, to assess the effect of risk management on member advancement and to explore the effect of voluntary savings on member advancement of licensed deposit taking Saccos in Nairobi city County, Kenya. The thesis adopted a descriptive cross sectional survey design, where both quantitative and qualitative approaches were applied. Semi structured questionnaires and interview guide 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 city county. They comprised of the chief executive officers, the deputies and the departmental heads from the sampled licensed deposit taking Saccos. A pilot test was conducted in Kiambu county on a sample of 5 deposit taking Saccos who were not included in the final study sample. Cronbach Alpha test of 0.841 was obtained indicating the reliability of the research instrument. Content and criterion validity were ensured through incorporating the experts' suggestions in the final document. Data was analyzed using descriptive and inferential statistics which included correlation analysis, and multiple regression analysis after testing for normality, multicollinearity and performing factor analysis. The study findings established a strong positive correlation between financial services and member advancement, a strong positive significant correlation was found between credit portfolio administration and member advancement, a strong positive significant relationship between risk management and member advancement, and a strong positive significant relationship between voluntary savings and member advancement of the licensed deposit taking Saccos in Nairobi city county. On combination of the four determinants, a strong positive significant correlation was established between the determinants and dependent variable (Member advancement). This indicated that the determinants influenced Member advancement to a greater extent when combined. On introduction of Regulatory environment the influence on the Member advancement was enhanced. Further, the arrangement of the determinants according to their effect on Member advancement indicated that, risk management had more effect on Member advancement followed by credit portfolio administration, voluntary savings and financial services. I recommend the licensed deposit taking Saccos to adopt these findings since they enhance their liquidity position and ensure sustained credit lending. Further study should be conducted to establish other financial factors that affect financial empowerment on Member advancement of the licensed deposit taking Saccos in Nairobi city county, Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

This thesis explored the effect of financial empowerment on member Advancement of licensed deposit taking Saccos in Nairobi city County, Kenya. Deposit taking Saccos are autonomous associations of people united voluntarily to meet their common economic, social and cultural needs and aspirations through jointly owned and democratically controlled enterprises. Their main business is the mobilization of deposits and credit lending to their members(Tanaomi & Asaadi, 2017).

According to the World Council of Credit Unions(2012), a deposit taking sacco interest from loans must exceed the operating expenses for it to maintain capital and solvency. Deposit taking Saccos follow a basic business model. Members contribute their savings to create a common pool from which they offer credit and other financial products to advance themselves Deposit taking Saccos are not-for-profit because their main purpose is to serve members and not to make profits. They are classified as financial intermediaries which must make only a surplus to cover their operations and benefit the members (Zeller M, 2013).

Customer surveys at deposit taking saccos consistently show higher customer satisfaction rates with the better services The saccos provide superior member service and are committed to help members improve their financial situations. In the context of financial inclusion deposit taking saccos provide a broader range of credit and savings products at a much cheaper cost to the members than do most of other non bank institutions. Being able to work with narrow margins allows deposit taking saccos to pay higher interest rates on deposits, and lower borrowing rates for their members. Deposit-taking institutions are of great importance to the national economy, because of the major

role they play in managing the deposits of millions of their members and the credit they offer. (Ian MacPherson, 2011)

1.1.1 Global perspective of the study

Alhadab, Clacher, & Keasey (2016) alluded that deposit taking Saccos (referred to as Credit Unions in the European countries) worldwide provide access to sustainable financial services while simultaneously helping their depositors gain better access to financial markets. Deposit taking Saccos (Credit Unions) were started in south Germany in 1846 by Freidrich W Reifeisen and Hermanschultze Delitsche. Herman schultze Delitsche began the savings and credit cooperatives for small craftsmen and the urban middle levels. Freidrich Reifeisen began the local savings and credit cooperatives. Deposit taking Saccos were developed to meet the basic human needs of deposits and borrowing methods without taking risks (Getachew, 2007). 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).

The French Credit Union *Agricole* is the biggest bank in the world outside of Japan. The German people's banks have over 28 percent of the deposits market share, Rabo bank Netherlands 25 percent. Ireland has a strong deposit taking movement, with 1.6 million people in membership. Canada has one of the highest concentrations of deposit taking Saccos. In the French speaking Quebec region, there are 1300 deposit taking Saccos and more branches than the banks. They have more than a third of the region savings deposits, and make a third of all member credits. In Saskatchewan, 57 percent of the community belong to deposit taking Saccos. In the USA deposit taking Saccos are also very operational. There are over 18,000 deposit taking Saccos, with more than \$300

billions in assets. They have 13 percent of the member Sacco subsector and eight percent of member deposits (Kempson, 2007).

Birchall (2004) In Geneva international labour organization (ILO) conference, stated that deposit taking operations record good performance that Financial services such as deposits and loans, attract consistent flow of funds and spread out risks. They may not require financial assistance from 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).

Mook, Maiorano and Quarter (2015) explained The World Council of credit Union as the global trade organization and development agency for Saccos. The organization promotes the sustainable development of Saccos around the world to empower depositors through access to d affordable financial services. The World Council collect views from member countries and represents deposit taking Saccos to global standard setters including the Bank for International Settlements (BIS), Financial Action Task Force (FATF), Financial Stability Board (FSB), International Accounting Standards Board (IASB) and the (G20) Group of 20 (Johnstone, 2004).

1.1.2 Regional perspective of the study

Ishengoma and Towo(2016) described that the idea of deposit taking Saccos in Africa was brought by a Roman Catholic priest, Father John McNulty to a town in Ghana, in 1955. John McNulty lived in Ireland and went to school in Canada where he studied about Saccos. The Father advised the villagers to register Saccos which helped the depositors to address their financial issues that they could not do as individuals. He inducted people, who became Sacco pioneers on the African continent. The victory of Saccos spread throughout Ghana and by 1968. The Saccos in the whole country came

together to form the deposit taking Sacco of Ghana , which was set up to promote, organize service and co-ordinate the deposit taking activities.

WOCCU(2012) reports, indicated there were 51,013 deposit taking Saccos in the world, having a total of 196,498,738 depositors and a total penetration rate of 7.8%. The economically active population age ranged between 15-64 years. The largest markets in Africa by number of depositors as of December 31st 2011 are Kenya, Ivory Coat and Benin (WOCCU, 2012).

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 on the cooperative principles. The ability to deposit and access loans assist depositors raise their incomes and accumulate wealth. This has been proved true of the working low class, the self-employed and low producers who often find themselves with limited contribution in the economic growth of their nations (Yeron et al.,1994).

In Ethiopia, SACCOs encourage savings among members by providing a safe, convenient, and attractive method for investment. They eliminate hardship by providing a medium for members to borrow at reasonable interest rates with few conditions. However, lack of savings culture is considered as a major problem (Benson, Bartholomew, & Kazungu, 2013).
Benson, O., Bartholomew, T., & Kazungu, I. (2013). Relationships between sources of funds and the outreach in Saccos: Tanzanian case.

1.1.3 National perspective of the study

Today deposit taking Saccos play a significant role in improving peoples' socio-economic status the world over. They are gradually responding to the fast changing and competitive financial environment and are adopting new approaches to the original model. Membership was initially based on common bonds which have since been

opened up. The objective and purpose for which deposit taking Saccos are incorporated, is to transact the business of mobilization of savings, and advancement of credit facilities to their members(ACCOSCA, 2014)

The provision of savings and credit facilities is part and parcel of financial services sector and consequently, deposit taking Saccos are often referred to as financial cooperatives. They are clustered as such together with other financial intermediating cooperatives like investments and housing cooperatives. Financial intermediation involves situations in which financial institutions stand between counterparties in a transaction, in this case the co-operative enterprise acts as the financial institution in the intermediation, in a near similar way that a banking institution would (Korczakm 2014)

Muraguri and Irura (2014)alluded that the World Council has supported deposit taking Saccos in Kenya since 1997 to strengthen the sector and expand financial inclusion in the nation. It developed technical assistance programs financed by Financial Sector Deepening Trust, Kenya (FSD Kenya), U.S. Agency for International Development, Bill and Melinda Gates Foundation and U.S. Department of Agriculture, offering technology solutions to SACCOs that enhance their business growth. WOCCU Service Group (WSG) Development programs brought financial empowerment to many people around the world (Morgan, 2005).

Financial Sector deepening(2005) did a survey which revealed that some 6,000 Sacco Societies provided financial services in Kenya. They are most patronized by the middle and low income members who are unable to access traditional bank accounts. About 215 Saccos operated front office service activity (FOSA), quasi-banking services with products similar to those offered by commercial banks. SACCOs grew in size and numbers leading to capacity gaps in governance, technology and financial management (FSD, 2005).

This risk was clearly identified by the Financial Access survey in 2006 which provided policy makers with information about the state of financial inclusion. It revealed that most people with access to financial services were using SACCOs; informed on gaps that needed to be addressed and revealed that SACCOs could no longer be regarded simply as negligibly small societies. Their failure could trigger a systemic risk to the whole economy (MOCDM, 2012). As these challenges could not be adequately addressed by the existing cooperative Societies Act, 1997(amended 2004), policymakers and key stakeholders agreed that a specific legislation was needed (MOCDM, 2006).

The SACCO societies Act was created in 2008. The Act contains provisions to make the SACCOs offering banking services more secure and efficient, and protects the shares and deposits of the customer base. The main structural implication of the Act was the establishment of a new institution, the SACCO Societies Regulatory Authority (SASRA), a semi autonomous government agency under the authority of the Ministry of Cooperative Development and Marketing (MOCDM).It is mandated to license and supervise deposit taking SACCOs, assisting them in meeting the regulation requirements by 2014Muraguri and Irura (2014).

The SACCO regulation was gazetted in June 2010, requiring all SACCO Societies that were operating Front Office Services Activity (FOSA) to apply for licenses from SASRA and to meet Prudential regulatory framework. This was part of the wider reform agenda in the financial services sector to ensure that Sacco industry plays its pivotal role in driving national economic development in line with Vision 2030 (Bailey, 2001). 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(ACCOSCA, 2012).

The law required all Sacco societies conducting deposit taking Sacco business prior to publication of the Sacco Societies Regulations, 2010 to apply for licenses by June 2011. The affected 215 Saccos fully complied. By the end of the year 2013, the Authority had licensed 132 Sacco societies, 18 had either been issued with the letters of intent or inspected for licensing while another 65 did not satisfy the minimum licensing requirements (Ademba,2013).As at 31st December, 2014 182 DTS had been licensed out of which 42 are in Nairobi County. The licensed deposit taking Saccos (DTS) accounted for over three quarters (76%) of the industry's assets and deposits and 91% of the assets and deposits of FOSA operating Saccos. The transitional regulations further required the deposit taking Sacco societies to fully comply with the prescribed prudential financial standards in respect to capital adequacy and diversification from non-core business activities by June 2014.

FSD (2012) advised that the policy objective of prudentially supervising Saccos was to improve transparency and accountability in their governance. SACCOS have adapted a business model with organization structure similar to other financial institutions and providing financial products similar to those offered by retail commercial banks (Bailey, 2001). They are transformed into major financial institutions as they propel to adopt the best financial practices to fair favorably with competitors and position themselves for growth and transformation (Goodman,2009). According to the MOCDM strategic plan 2009 – 2013, the SACCO subsector has the fastest growth within the co-operative movement. SACCOS are increasingly diversifying their activities, and introducing innovative products in order to respond to the challenges of the market as they endeavor to satisfy financial demands of their members (Smith et al.,2002).

Manyara (2003) observed that the SACCO business model enabled majority of Kenyans to engage in social economic developments through the acquisition of affordable and sustainable credit and the accumulation of savings for future consumption. This is a key pillar for realization of Kenyan vision 2030 when the country is expected to become a middle level industrialized economy in terms of economic development in the

fulfillment of the global millennium goals (Birchall, 2004). The SACCO regulatory body (SASRA) formed in the year 2010 to regulate the operations of deposit taking SACCO set up reforms in the SACCO subsector which restored confidence among the members leading to improved business performance in their front office operation services (Johnson & Sherraden, 2006).

FSD Kenya (2013) advised that the legal framework for the supervision of deposit taking Saccos is founded in the Sacco societies Act, which provides the legal mechanisms for the prudential regulations of deposit taking Saccos in Kenya. This is in line with international best practices of financial regulation and supervision of deposit-taking financial institutions. The Sacco societies Act is administered by the Sacco Societies Regulatory Authority. The Act is a specialized legislation dealing mainly with prudential regulation, and applies principally to deposit-taking Saccos whose activities are prudentially regulated. (Sasra reports,2014).

Korczak (2004) noted that SACCOS were growing fast and the gap for alternative funding to sustain liquidity was yet to be explored. ksh.280 billion was the estimated amount needed by SACCOS for onward lending to members. To achieve this goal, the SACCO subsector needed to identify and implement alternative sources of financing to bridge the existing credit gap (Kibe,2012). The cheapest way to build capital to fund investments and expansion, to meet regulatory requirements and member needs is based on member recruitment drives. The share promotions were yet another method of raising cheap internal capital in an institution. This fell short in meeting the rising member demand for credit (Lyons & Neelakantan,2008)

1.1.4 Financial empowerment

According to the Woccu reports (2014), Financial empowerment is creating the knowledge and ability of members to manage funds and use financial products and services to improve their positions. It may include financial education and financial

literacy, but it is more focused on building the ability of members to manage funds and use financial products. Financial empowerment is also focused on providing access to services that improve the positions of members.

Financially empowered members are more informed, more skilled and knowledgeable. The members know where to seek assistance when they are financially challenged. This method of Financial empowerment create confidence for members to effectively use their financial knowledge, skills, and resources to achieve their desired objectives. It helps members to transition from a low level to a higher level using the services they receive from their deposit taking Saccos and therefore helping them increase financial stability (Broun, 2014).

1.1.5 Members Advancement

Feinberg (2014) alluded that Deposit taking Saccos target the underserved members with credit challenges having inconsistent incomes that cannot match the loaning requirements of the mainstream commercial banks. Members start Sacco deposit taking business with marginal savings which with time grow to become large savings deposits. Deposit taking members borrow loan products from the institution DTS want their members to not only improve their financial well-being but also to increase their assets base through savings mobilization. Members access financial services from the deposit taking Saccos to realize their future investment dreams and other un expected occurrences. These financial needs include home improvements, holidays, household repairs and bills, car repairs, back to school costs, Christmas, communions and confirmations, weddings and any other expenses that arise in our day to day living. Other investment categories are; starting a new business, expanding an existing one or venturing into real; estate and other long term investments opportunities that generate future cash flows(Kempton et al.,2015)

1.1.6 Deposit taking Saccos

A Deposit taking Saccos is a member owned financial cooperative, controlled by its members and operated on the principle of people helping people, providing its members credit at competitive rates as well as other financial services. They are not-for-profit enterprises and enjoy tax-exempt status, as they provide traditional banking services. Deposit taking Saccos follow a basic business model: They are licensed by the Sacco Societies regulatory authority to carry out front office Sacco business in Kenya. Members pool their money in order to be able to provide loans, and other financial products and services to each other. Any income generated is used to fund projects and services that benefit the members. Deposit taking Saccos have fewer options than traditional banks, but offer clients access to better interest rates because they are not publicly traded and only need to make enough money to continue daily operations. Deposit taking Saccos are exempt from paying corporate income tax on their earnings (Magill, 2014).

Originally, membership in a Deposit taking Saccos was limited to people who shared a "common bond": working in the same industry or for the same company, or living in the same community, but in the recent past, Deposit taking Saccos have loosened the restrictions on membership, allowing the general public to join. To do any business with a Deposit taking Saccos you become a member and you participate in the Sacco affairs. The process of generating funds at deposit taking Saccos starts by attracting savings deposits. Being able to work with narrow margins allows deposit taking Saccos to pay higher interest rates on deposits, while also charging lower fees for other services. While these differences sound small, they do add up, giving deposit taking Saccos a significant advantage over banks when competing for deposits. Deposit taking systems vary significantly in terms of total assets and membership having assets worth several billion in cooperative banking, In the context of financial inclusion, deposit taking Saccos claim to provide a broader range of loan and savings products at a much cheaper

cost to their members than do most microfinance institutions (J. Carroll M & Gilbert, 2005).

1.1.7 Regulatory Environment

The legal framework for the supervision of Deposit taking Saccos in Kenya is founded in the Sacco Societies Act of 2008, which provides the legal mechanisms for the prudential regulations of Deposit taking Saccos in Kenya. This is in line with international best practices of financial regulation and supervision of deposit-taking financial institutions. The Sacco Societies Act is administered by the Sacco Societies Regulatory Authority, an autonomous arm of the state department of cooperatives(FSD Trust Kenya, 2015).

With the expansion of Kenya's financial system within r the last two decades the Sacco sub sector also developed significantly. With increased complexity and the sheer size of institutions, the risks have also necessarily changed SACCO also has its vulnerabilities. The failure of even a small number of loans can be difficult to absorb before members lose confidence in it It is difficult for a small institution to cope. The many people who have had to wait their turn for a loan from a SACCO are painfully familiar with this problem. Accepting withdrawable deposits through Front Office Service Activities (FOSA) enabled Saccos to offer a wider range of services and diversified funding sources which introduces them to wider range of external and internal risks. Financial regulation came in to address these type of problems for example in the financial institutions. the management take excessive risks, the maintenance of sufficient capital to absorb the inevitable losses and observing adequate liquidity to meet day-to-day operations. The prudential regulations support safe and sound Deposit taking Sacco systems (Sasra reports 2016)

1.2 Statement of the problem

Despite the effort made by the cooperative stakeholders to improve member advancement, Deposit taking Saccos still experience shortage of funds for on lending to the Sacco members. This is due to the financial liquidity gap existing between the available funds collected as member deposits and the amount of loans required by members as borrowings for advancement. This situation curtails the main deposit taking Sacco business 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. The reports revealed that the level of credit portfolio exceed the level of member deposits, therefore indicating insufficiency of the internal funds for on lending to the growing membership. This is evident that more studies should be conducted to establish other determinants of member advancement.

Byrne, Power, McCarthy and Ward (2010), conducted an exploratory study on the potential for impact of deposit taking Saccos on members' financial capability. Their conclusion was that most deposit taking Saccos engage in some form of financial education in the community, however some are restricted to what could be described as low-commitment activities. Few deposit taking Saccos have come up with innovative schemes targeted at their member advancement. On the other hand Smith and Woodbury (2010) carried out a research on member borrowing habits: deposit taking Saccos vs. banks. The study found out that deposit taking Saccos are more immune than banks on

business and economic cycles. The deposit taking Saccos lending grows gradually with member contributions. They are more restrained to the funds available.

Many studies examined the determinants of member advancement in many countries around the world. Burger & Zellmer (2016), Freidrich Reifeisen (2015) for the Germany credit unions, Kempson (2017) for the Canadian credit unions, Yeron et al.(2015) for the United States of America credit unions, Birchall (2017) for the Geneva credit unions and established a significant effect on Deposits mobilization, Market outreach, credit portfolio quality, and liquidity levels as determinants of member advancement. Financial sector deepening (2016) studies in Kenya established a significant relationship between growth in membership, partnerships with local financiers, establishment of Sacco interblending facility, the creation of Central finance fund by the Sacco umbrella body and member advancement in deposit taking Saccos.

ACCOSCA (2017) established significant effect on liquidity and operational efficiency and an insignificant effect of operational structures on member advancement of Deposit taking Saccos in Kenya. These studies indicate clearly that the factors: Financial services, Credit portfolio administration, risk management and Voluntary savings were not covered. Besides, the studies did not look at the effect of financial empowerment on member advancement of licensed deposit taking Saccos in Nairobi city county, Kenya. The current study applied a cross sectional survey that involved the in-depth collection of information on members attitude and opinions about a particular phenomenon under study. Therefore, the study aimed at examining the effect of financial empowerment on member advancement of licensed deposit taking saccos in Nairobi city county, Kenya.

1.3 Objectives of the study

The study sought to address the following objectives

1.3.1 General Objective

To determine the effect of financial empowerment on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

1.3.2 Specific objectives

1. To examine the effect of accessing financial services on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.
2. To evaluate the effect of credit portfolio administration on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.
3. To assess the effect of risk management on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.
4. To examine the effect of voluntary savings on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.
5. To explore the moderating effect of Sacco regulatory environment on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

1.4 Research questions

1. What is the effect of accessing financial services on Member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya?
2. What is the effect of credit portfolio administration on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya ?
3. What is the effect of Risk management on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya?
4. What is the effect of voluntary savings on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya?
5. What is the moderating effect of SACCO regulatory environment of on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya?

1.5 Research Hypotheses

The study was guided by the following null hypotheses:

1. H_{01} : Financial services have no effect on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.
2. H_{02} : Credit portfolio administration has no effect on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya .
3. H_{03} : Risk management has no effect on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.
4. H_{04} : Voluntary savings have no effect on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.
5. H_{05} : Regulatory environment by the regulatory authority which supports accountability and Confidence has no effect on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

1.6 Justification of the study

This section reviewed the significance of the study to; The Members, The Sacco, The regulatory Authority, The National Government, Academics and Researchers.

1.6.1 The SACCO

The SACCO as a business enterprise is a key beneficiary in the financial empowerment of members that increases the financial soundness of Sacco business. The findings of this study improved governance and increased efficiency in Sacco business through

adoption of prudential standards which enhances transparency and accountability in management of Deposit taking Saccos

1.6.2 The Stakeholders

Stakeholders are the first beneficiaries of financial empowerment leading to increased level of savings and credit and increased member confidence in the Sacco; as deposit taking Saccos continue to promote best practices in the conduct of Sacco business. The findings of this study serve as a prerequisite in enhancing financial stability and access to financial services by the unbanked Kenyans. It also enables majority of Kenyans to engage in social economic advancement through acquisition of sustainable and affordable credit and accumulation of savings for future consumption.

Financial empowerment increases growth in assets and deposits of the existing 3 million Kenyans who rely on Saccos in financing their personal growth and enterprise development. The findings assist FOSAs operating Saccos who consistently account for three quarters of the assets and deposits of the entire industry underpinning their popularity with Kenyans.

1.6.3 The Regulatory Authority

The study benefits the SACCO Societies Regulatory Authority (SASRA) in achieving its mandate to license deposit taking SACCOs, assisting them in meeting the regulation requirements in enhancing transparency and accountability. The regulatory framework creates governance initiative that enables the broad transition from a management committee to an oversight board providing strategic direction, policy formulation and performance benchmarks.

1.6.4 The National Government

To the National Government, financial empowerment ensures that the Sacco industry plays its pivotal role in driving national economic development in line with Vision 2030. Deposit taking Saccos and other Saccos in the subsector which control 30 per cent of the Gross domestic product(GDP) and account for 80 per cent of the total accumulated savings contribute immensely to the National Government. And for 28million Kenyans who make 63 per cent of the entire population and who depend on co-operative related activities, directly and indirectly, for their livelihood, continued financial empowerment through deposit taking Saccos significantly play a greater role in improving their socio-economic status.

1.6.5 Academics and researchers

Academicians and researchers who explore alternative financing models for deposit taking Saccos; which are most attainable, reliable and sustainable, find the study useful as it adds greatly to the body of knowledge for research.

1.7 Scope of the study

The scope of the study involved the deposit taking Saccos registered and regulated by the Sacco societies regulatory authority(SASRA) which are licensed to offer front office service(FOSA) in Nairobi City County, Kenya. Nairobi City County had 42 licensed deposit taking Saccos which are also the largest Saccos in membership and in the volume of Assets. Harambee Sacco and Mwalimu National Saccos were the two largest deposit taking Saccos in Nairobi city county with capital base of 12.4 billion and membership of over one hundred members.(SASRA reports, 2014)

1.8 Limitations of the Study

There problem encountered in the study was to get the permission of the office to gather the required data and the reluctance of the respondents to return the questionnaire. The respondents also feared to disclose information due to competitors' threats. It is very important to note that these limitations did not have any significant interference with the outcome of the study. In order to avoid such inconveniences, the researcher got one month permission from the office and used all leisure time to collect the data

To enhance the return rate of the questionnaires, the researcher used data collectors or informants who had the knowhow of the research questionnaire. The respondents were also reassured that the information collected was for academic purposes only as evidenced by the University introductory letter and the benefits obtained thereafter. The letter obtained from the University and also NACOSTI give the respondents assurance. Further, some chief executives failed to respond to a number questions. To solve this problem the researcher communicated easily by reading unanswered questions to getting verbal responses and subsequently got feedback.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a theoretical and empirical review underlying the study, conceptual framework illustrating the relationship between the independent variables of financial services, credit portfolio administrative policy, risk management, and the voluntary savings on the dependent variable of member advancement along with the moderating variable of the regulatory environment that influence this relationship. The study proceeds to present member advancement, critique of the literature, the research gaps and finally the summary.

2.2 Theoretical framework

In this section, a critical review of the models(theories) on deposit taking Saccos (credit union) as formulated by the World council of credit union(WOCCU) is undertaken leading to the selection of the appropriate theoretical framework, adopted in the study based on some of the authors including Pana and Mukherjee (2010); Osoti (2014); Okello (2006); Rhyne & Otero (2001) ; J. Boomgard & K. Angell (2001); Schmidt & Zeitinger (2000); (Magill, 2001). A critique of the chosen theoretical framework used in the study is then presented and linked to the conceptual framework.

2.2.1 Accounting, Financial Discipline and Prudential Standards theory

Ndambiri, Munene and Wanjohi (2017) explained that all accounting and reporting systems must observe Transparency. This is necessary to gaining credibility in the locations where deposit taking Saccos operate. Transparency is realized by presenting easy-to-understand accounts and reports that stimulate greater depositor confidence. Key financial information and ratios are made available through different media, the most

common being the annual reports and the annual general meetings. The final phase of transparency, which has already gained credibility in Deposit taking organizations, occurs when a professionally competent third party such as the external auditor or a rating agency verify and attest to the accuracy of the reports and give opinion (Cohem, 2005).

Clement, Mbewa and Jagongo (2012) noted the eight core financial disciplines, accompanied by their corresponding prudential standards as promoted by WOCCU in order to provide a safe and sound place for members to deposit their savings. These are: the delinquency ratio: less than 10% of total loan portfolio over 30 days delinquent ; Loan loss provisions 35% of all delinquent loans 1 to 12 months; Loan charge 100% of all delinquent loans greater than 12 months; Institutional capital reserve ratio: greater or equal to 10% of total asset; Liquidity reserve ratio 15% to 20% of savings deposits; Nonearning assets ratio: less than 10% of total assets; Operating expense ratio: less than 10% of average total assets; Return on assets ratio: greater than 1% of average total assets (Chua et al., 2014).

Pana and Mukherjee (2010) alluded that Sound organizational controls and structures need to accompany deposit mobilization in order to protect the deposits and manage efficiently the increasing number of low balance accounts. To meet prudential standards, deposit taking Saccos implement the financial management disciplines of capital accumulation, loan classification, delinquency control, loan loss provisions, capitalization, and liquidity management in deposit taking management procedures and practices.

This theory is closely linked to the first objective of this study on the relationship between financial services and member advancement. It is also related to the second objective on relationship between credit portfolio administration and member advancement and to the fifth objective on exploring the moderating effect of Sacco regulatory environment; because credibility and transparency in the financial statements

of the institution promote economic decisions of members. This is exactly the recommendation of the regulator.

2.2.2 Operating Efficiency theory

Lyons and Scherpf (2006) described that, as the front office operations created greater competition, the concept of operating efficiency took greater significance. Competition force financial institutions, including deposit taking Saccos, to look for ways to improve member satisfaction, including improvements to lending methodologies, product mix, and the cost of services, in order to retain their members. Deposit taking Saccos operating front office services proves to be the most efficient organizations. They have always used lower cost, individual based lending methodologies, an approach that most leading NGOs are now adopting in their search for greater efficiency and customer satisfaction (Kourmoussi *et al.*, 2018).

Other important Deposit taking strategies to maintain operating efficiency include Employee remuneration (Korczak, 2004). Deposit taking sacco salaries are lower than Non-Governmental organizations salaries because they are not for profit but are service oriented. Deposit taking saccos found that as long as they maintain their delinquency rate below ten percent, they can still be profitable and ensure safe and sound organizations. Deposit taking saccos found that the loan monitoring and collection expenses required to reach very low delinquency levels far exceed the cost of provisioning for delinquent loans. Deposit taking front offices also offer large loans and seek large deposits from their members, and thus can offset the higher cost of making smaller loans to the poor by apportioning fixed costs (Chua, Lim & Chew, 2014).

The theory is therefore closely linked credit portfolio administration and the risk management of the deposit taking Saccos in Nairobi city county Kenya which are the second and third specific objectives of this study. The operating efficiency is of

particular interest to the institution which must improve the lending methodologies and effectively compete with other players in the Sacco subsector.

2.2.3 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. In order to pay attractive deposits rates and build institutional capital through earnings, the 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 deposit 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 third and fourth objectives of this study on the relationships between risk management; the voluntary savings and member advancement since voluntary savings is the basic source of funds for on lending to members as opposed to the external borrowing. Spacious and comfortable facilities presents a professional image which is conducive for risk mitigation.

2.2.4 Savings Mobilization theory

Corr (2006) advised that the success of Deposit mobilization shows that low-income people substantially increase savings deposits if provided with convenient service, market returns, and security for their deposits. The most impressive result of deposit mobilization is that it provides a key solution to the outreach-versus-sustainability finances: It attracts large numbers of poor people seeking deposit services, as well as depositors from different social and economic groups, thereby attaining the liquidity and volume needed to ensure long term operating and financial growth.

Many Deposit taking Saccos demonstrate the power of deposit mobilization and the possible recruitment (Gloukoviezoff, 2009), when organizations offer deposit products with competitive interest rates, organizational security, and convenient services. Effective deposit mobilization is one of the cornerstones of front office services, because

it requires strict adherence to sector based disciplines. The gross financial margin is the difference between what is charged on loans and what is paid on savings and shares, before deducting operating expenses. Not only have deposit taking Saccos been found to be second only to banks in lending and especially in providing deposit services to low income clients, but their prevalence starts from real advantages deposit taking Saccos have over other providers of financial services to marginalized customers (Braverman & Guasch, 2014).

Among many advantages, there are four primary strengths of deposit taking Saccos forced it delivery: services for lifetime asset growth, mixed outreach, savings mobilization and full service array of loan products. The demand for liquidity is far more important to most middle level citizens than the demand for loans. deposits mobilization is just as important as credit in meeting the financial needs of the middle level population. What most distinguishes deposit taking Saccos from other non bank financial entities offering credit services is the ability of the deposit taking Saccos to mobilize mass numbers of small, voluntary, deposit accounts (Branch, 2013).

The financial systems approach to microenterprises recognizes that deposits are as important a service for the poor as credit, and that deposits are crucial in building self sufficient financial organizations. To date, although many other programs have incorporated savings elements, only the Sacco movement and scattered programs have embraced deposits as equally important as loan for dealing with poor people (Bailey, 2001).

This theory is closely linked to the fourth objective of this study on voluntary savings and member advancement. Voluntary savings help to attain liquidity and the volume of funds required to sustain growth and continued lending to the low income members

2.2.5 Product Diversification and Aggressive Market Penetration theory

Cuevas and Fischer (2006) noted that a significant benefit of deposits mobilization is the remarkable growth in the volume of finances available for borrowing. With liquidity to spare, a front office service deposit taking may offer a broader selection of deposits and loan products tailor made to the needs of the membership. It has been shown that all human beings, whether rich or poor, have the following similar daily physical needs: Work, Housing, Health, Education, Transportation, Security, deposits. Virtually everyone experiences the same needs throughout his lifetime, but not everyone has the same requirements at the same time (Dixon, 2006).

Esho et al.(2005) alluded that product diversification was necessary to meet the needs of a diverse membership such as that found in deposit taking Saccos. At certain times during one's life, different needs emerge such as small loans for school fees, unforeseen medical expenses, or working capital for a microenterprise. At other times, a person may need larger loans for capital investment to expand an enterprise or for home improvement. At still another time, there may be a need to save for planned investments in the future. Failure to meet these diverse needs is one reason for high falling rates at some Saccos that do not offer diverse products (Worthington,2010). While there has been no comprehensive assessment of deposit taking Saccos falling rates, few front office deposit taking Saccos are concerned about it.

Can and Gozgor (2018) discussed that aside from meeting member needs, there is an organizational benefit from product diversification; the diversification of risk. As a deposit taking Sacco diversifies its loan portfolio, it is able to minimize the consequences of over lending to one segment of the sector. Diversification of risk is important to deposit taking Sacco because any significant deterioration in the quality of a loan portfolio can impair public image, its ability to mobilize deposits, and ultimately its financial sustainability. Deposit taking membership and the lending portfolios

generally are broadly diversified. Service to the poor is blended with service to a broader range of the local people (Tianjiao, 2014).

Deposit taking Saccos serving the poor achieve sustainability by spreading their costs across loans of larger and medium sizes as well. In this manner, they reach a large absolute number of the poor on a sustainable basis. Deposit taking Saccos offer deposits first, self-sustainable approach to front office service that has already successfully met the needs of millions of low income members around the world. Members financing needs determine their Deposit taking Saccos loan product offerings. Sacco loan portfolios are widely diversified. Since they lend for a wide variety of purposes, the portfolio risk of specializing in a single type of product is minimized (Magill, 2014)

Tanaomi and Asaadi (2017) recommended on aggressive outreach to the poor even if not serving them exclusively. The Deposit taking Sacco membership base is diversified economically. Diversification of membership decreases the covariance credit risk to the Sacco. Community Saccos develop a membership base diversified in economic activity and socio economic conditions. Not all of the membership (and therefore the financial base) would be affected by a sectoral economic crisis. Diversification of membership also reduces the covariance credit risk to the Deposit taking Sacco.

Deposit taking Sacco services is not focused exclusively on the poor. Smaller loan sizes, typical of loans to the poor, tend to involve higher costs per client. Saccos serving the poor usually maintain sustainability by spreading their costs across loans of larger and medium sizes as well. In this manner, the Deposit taking Sacco reach a large absolute number of the poor on a sustainable basis (McCathy, 2005).

Worthington (2010) noted that the key to aggressive market penetration is to have a variety of high quality financial products and services available to different segments of the population. If a front office service Deposit taking Sacco is successful at improving

its physical image while simultaneously improving the quality of its financial products and services, it attracts new members. One of the best ways to verify the usefulness of a Sacco services is monitoring the number of new people who join to access those services, or measuring the number of existing members utilizing the services. It is scale, not exclusive focus that determines whether significant outreach to the poor occurs when a Sacco develop marketing strategies and offers a broad range of products and services to meet the diverse needs of its customers (Varanasi,2005: Tianjiao,2014)

The theory is therefore closely linked to financial services of the deposit taking Saccos in Nairobi city county Kenya which is the first specific objective of this study. Product Diversification imparts satisfaction to different needs of the diverse membership. Market Penetration increases the number of member who apply for small loans for unforeseen events or those applying for larger loans for capital investment.

2.2.6 Agency Theory of Finance

Jensen and Meckling (1999) predicated the agency Theory of Finance on the assumption that the previously described theories are implausible on the theoretical level and impossible to test empirically. The new vision underlying the research argues that there is an agency relationship between shareholders and managers; thus, managers serving as shareholders agents are required to act in the shareholders best interest. However, the managers and shareholders' interests may not always converge and managers may focus on a range of personal benefits.

Although shareholders deter such value transfers, the absolute monitoring of management remains unattainable ideal. Moreover, such mechanisms generate a range of related costs that not only cause a decline in the firm revenue but also influence its capital structure. The founders of the theory (Jensen and Meckling, 1999) showed that the optimal capital structure is the result of a tradeoff between benefits and agency costs in the context of increased debt financing.

Subsequent research conducted by Hellman, Murdock and Stiglitz (2000) highlighted that diverging interests of managers and shareholders also arise due to disagreements on the decision to continue the firm current operations. The authors showed that whereas shareholders opt for liquidating the firm when cash flows are no longer sufficient, managers always choose to continue the firm operations. In summary, the two researchers showed that leverage is positively correlated with firm value, default probability, free cash flow and managerial reputation. Leverage is negatively correlated with the extent of growth opportunities and with the probability of re-organization following default (Gogo & Oluoch, 2017).

Furthermore, analysis of the issues in terms of the size of the firm shows that in the case of smaller businesses, the conflicting interests of equity holders and debt holders are particularly severe. This is due to the fact that most managers of small firms are also the owners of the firms. In such situations, lenders may require additional collateral. As a result, the structure of the firm assets is examined in direct correlation with the costs entailed by possible financial distress. If a firm invests mainly in tangible assets the potential costs incurred due to financial distress is lower. Conversely, a firm focused primarily on investments in intangible assets bear higher costs induced by potential financial distress (Gomber et al.,2018).

Another observed aspect is that the capital structure is determined by the conflicts between the interests of the firm inside investors and those of outside investors. Managers choose to invest all the available internal funds, relegating debt financing to a secondary role. Later developments, viewing the firm as a heterogeneous set of interests, have shown that the source of inter agent conflicts is the separation of management and finance and of ownership and control, respectively. From this perspective, the capital structure is significantly influenced by the existence and operation of corporate governance mechanisms, (Gomber et al.,2018).

This theory is closely linked to the second objective of this study on the relationship between credit portfolio administration and member advancement. The agency relationship between shareholders and managers relate closely to the credit portfolio where managers while expected to act in the best interest of the deposit taking Sacco; act for their personal benefit and therefore the two parties disagree on pertinent operational decisions.

2.2.7 Pecking order Theory of Finance

This was traced back to research by Matemilola and Bany A (2011) which asserts that the order of financing sources takes precedence over their weight. The traditional version of the theory is premised on the assumption that the firm cannot set a target debt to value ratio. Myers (1984) introduced an extended version of the theory where asymmetric information available to managers and investors causes adverse costs of selection. The theory later developed as an alternative to trade off theory. The preference for internal financing, followed by debt financing and equity issuance as a last resort, represents the “pecking order of financing” new projects, as firms recur to self-financing under asymmetric information conditions (Manyara, 2003).

The novelty of the theory lies in incorporating information asymmetry, as managers rather than outside investors have preferential access to information on the state of the firm. The assumptions underlying the architecture of the theory are the following; the capital markets are perfect; there are no transaction costs; the market value of shares is dependent on information available to the market; the firm possesses investment opportunities for which it must select financing resources. Based on these assumptions, the theory posits that the firm will prefer internal financing and that, should external resources be necessary, it will select the appropriate financing methods based on the risk level involved. Assuming that investors do not know the actual value of assets and of the firm development opportunities, they are unable to accurately evaluate the shares issued by the firm to finance its new investments (Esho et al., 2005).

Magali (2014) asserted that if firms are obliged to finance new investment projects by issuing equity, the markdowns on share prices are so high that new investors gain higher earnings than the net present value of the new project, resulting in net loss for current shareholders. Consequently, even though the net present value of the project is positive, the project is abandoned. Underinvestment is avoided by using other financing resources which are not marked down sharply by the market.

Hence, according to pecking order theory, the firm prefers to fund its investments first by internal resources, then by low risk borrowed capital, and, only as a last resort, by equity. The careful examination of the models introduced by the pecking order theory has enabled their classification on two levels; Theories focused either on the maximization of the wealth of certain firm insiders or on maximizing the firm overall wealth (Marion, 1987); and the Theories aimed at reducing contract costs in order to maximize the firm wealth. Subsequent research showed that larger firms face smaller costs of adverse selection than smaller firms (Mommartz & Holtmann, 1993).

The relevance of this theory to the study is that company managers typically possess more information regarding the company's performance, prospects, risks, and future outlook than external users such as creditors (debt holders) and investors shareholders. Therefore, to compensate for information asymmetry, external users demand a higher return to counter the risk that they are taking. In essence, due to information asymmetry, external sources of finances demand a higher rate of return to compensate for risk.

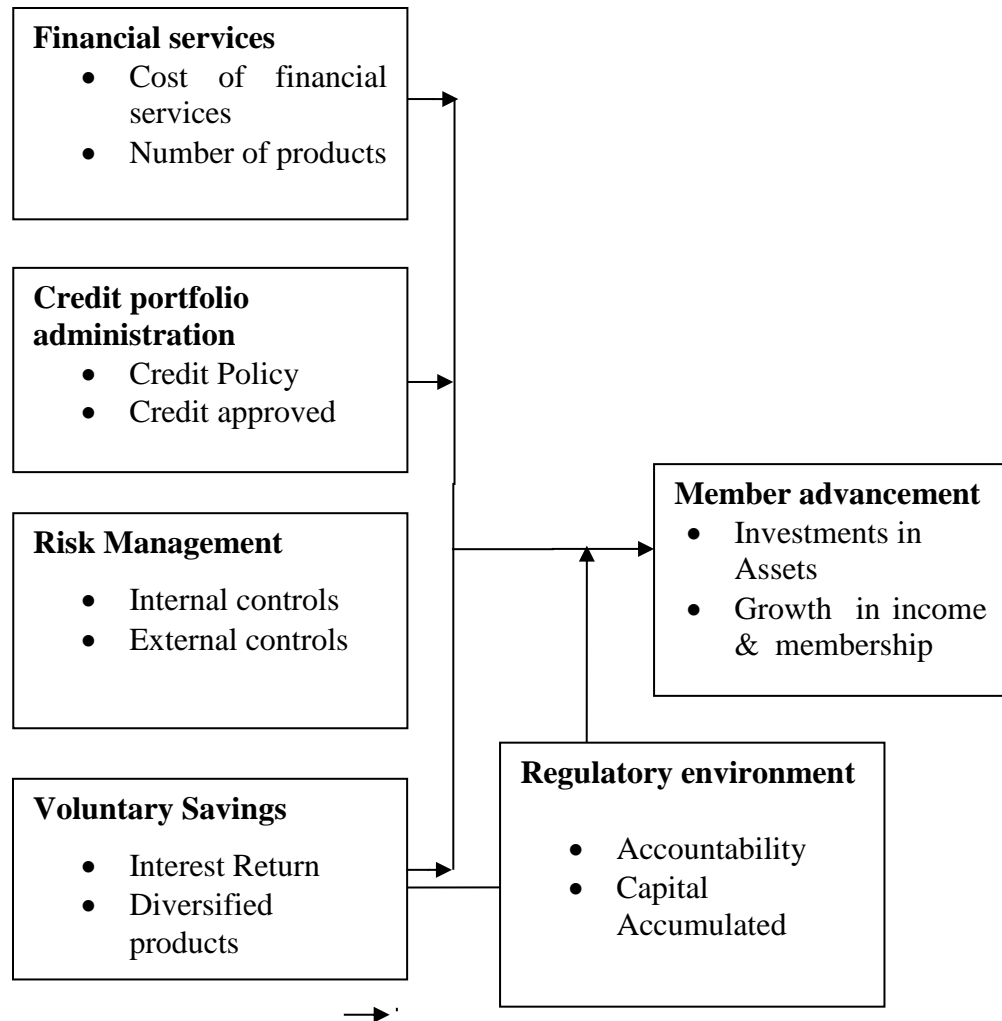
In the context of the pecking order theory, retained earnings financing (internal financing) comes directly from the company and minimizes information asymmetry. As opposed to external financing such as debt and equity financing where the company must incur fees to issue external financing, internal financing is the cheapest and most convenient source of financing. On the other hand, when a company finances an investment opportunity through external financing (debt and equity), a higher return is demanded because creditors and investors possess less information regarding the

company as opposed to managers. In terms of external financing, managers prefer to raise debt over equity the cost of debt is lower compared to the cost of equity.

The theory is therefore closely linked to voluntary savings of the deposit taking Saccos in Nairobi city county Kenya, which is the fourth specific objective of the study. Pecking order Theory presents the preferred order of financing, which gives preference to internal methods of financing which are cheap and low cost. This relates closely to voluntary savings which is internally created by members for on lending as credit.

2.3 Conceptual framework

The conceptual framework hereunder illustrates the perceived link between the independent (financial empowerment) and the dependent variable (member advancement) moderated by regulatory environment. The variables considered to affect member advancement in this study comprised of financial services, credit portfolio administration, risk management and the voluntary savings. Similar conceptual framework models have been widely used to study the effect of financial empowerment on member advancement (Ebisa, 2012; Deotto & Fontana, 2017).



Independent Variables Moderating variable Dependent variable

Figure 2.1: Conceptual Framework

2.4 Empirical review of variables

2.4.1 Financial services and member advancement

Onchangwa (2012) in his study on financial services realized that obtaining such services is a major obstacle in Africa, where most of the population is not included in

the formal banking sector. In the year 2007, about 70 percent of the families in Kenya depended on informal sources of financing until a later date when the Deposit taking Saccos came into existence. The DTSSs are not for profit businesses but are formed to serve their members and not to maximize business profits Like banks. They take deposits and give loans. As member owned organizations, they aim at providing a safe place to save and borrow at lower rates. Interest rates on loan and Service Fees at the Sacco are comparatively lower, while interest rates on savings are higher, than other for profit organizations.

Branch, Nathalie and Cifuentes (2010) in their effort to understand how Deposit taking Saccos reach out to the underserved potential members, observed that the DTSSs conduct member recruitment drives to identify member needs especially those underserved by banks and provide a level of service that is not readily available in other financial organizations. This service makes a difference for their members and the regions they serve. Members are given the choice of ownership, because the Saccos are owned by the same people they serve. Deposit taking Saccos operates with their main aim to serve all their members, and not to benefit a small group of the founding members. Deposit taking Saccos are categorized as a not for profit organizations because the generated surplus is paid to members in the form of interest on deposits. This is used as a healthy check on the mainstream commercial banking system. The lower interest on loans by Saccos bring competition on the banks to improve the rates they pay on savings accounts and lower their fees and rates on credit to the benefit of customers

Berger and Humphrey (2003) researched on Deposit taking Saccos and found a strong belief in the integrity of Saccos. Their operations are based on the cooperative principles, and therefore deposit taking Saccos are held in a position of high trust and esteem by their members. The type of services they offer is far less complex, more transparent and, easier to understand than the more segmented, targeted services offered by banks. This method is favoured as a means to increasing accessibility to financial services for those marginalized and with limited financial capabilities(Dixon, 2006).

Burger and Zellmer (1995) pointed in their study the need for deposit taking Saccos to develop products that change financial needs. Such services transition the Saccos into the mainstream financial system. They are brought to enhance the financial capability of their members. Deposit taking Sacco loans is diversified and this distinguish them from credit offered by banks and other financial institutions. Saccos offer very small loans for amounts that many banks consider not profit making. For bank loans, interest is charged on the principal loan, but interest on deposit taking Sacco loan a is paid on the reducing balance, and at a rate of no more than 1 per cent per month.

Byrne et al. (2005) studied on the manner members settle their loans in Deposit taking Saccos. They discovered that members are trained to observe payment periods. The loans are transparent, with no transaction costs or hidden charges. Many approved loans are offered with free loan protection insurance where members are covered up to certain limits in the event of death or permanent disability. Saccos offer small loans with low risk to the institution which create a means for members to build good credit rating thereby promoting prudent borrowing.

Dandapani et al.(2008) follow up research on Sacco financial services revealed that many Deposit taking Saccos offer other services in addition to standard savings accounts and loan facilities that empower people to take control over their finances. Included to these are budget account services where members lodge a fixed amount to their account at the end of every period to provide for payment of recurring bills, such as electricity bills, motor insurance, security charges etc. For a small fee, the Sacco manage the payment of these bills from the budget account. Emails and other Website content offers wide outreach to all the members. It is an interactive website featuring a variety of products and services designed to maximize the financial security of the members and potential members. Most of the other available products and services offered are: PayBill, Mobile Banking service, Business and Investment Loans, VISA Credit and Debit Card service, Fixed term accounts, point of sale cash points and the Automated

teller machines (ATM). The ATM cards enable members to use other bank visa branded ATMS therefore allowing them to access many other ATMS in the banking networks.

2.4.2 Credit portfolio administration and member advancement

Cohem (2005) conducted a study on the credit portfolio administration that indicated loan portfolio as the primary income generating asset for the deposit taking Saccos contributing about 95% of the Sacco gross income. The main goal, he noted of a loan portfolio specifies requirements for regular assessment of the risks and inadequacies inherent in the credit portfolio. The whole loan portfolio is assessed to derive its quality. The exercise includes classification of the deposit taking Sacco loan portfolio to measure its performance against the conditions provided in the initial loan agreement and the level of compliance (The Sacco societies regulation, 2010). Deposit taking Saccos are advised to undertake reviews of the credit portfolio at least once every quarter of the year; to make a risk classification of Assets and provisioning. Loans are classified into five categories and provisions made according to the magnitude of risk involved as follows; Performing loans 1%, Watch loans 5%, Substandard loans 25%, doubtful loans 50% and loss loans 100% (The Sacco societies regulation, 2010).

Burger & Zellmer (2016) in their study on the liquidity of deposit taking Saccos, discovered that when Saccos mobilize savings deposits, liquidity improves and those funds are given out as credit back to the members. It is important that the Saccos implement good policies and practices for credit screening and risk analysis so that the credit financed by deposits is collectible. Management of Credit risk includes strict delinquency monitoring, provisioning and collection procedures. In a Sacco, delinquency (portfolio at risk at 30 days) is 5% or less of the total loan portfolio. WOCCU advised the Saccos to make loan concentration limits to 10% of net capital (Dandapani et al., 2008)

Essendi (2013) revealed that all deposit taking Saccos should develop credit programs for their members. They have the capacity to provide diversified loan products which have a greater appeal to borrowers, with attractive features which meet their borrowing needs while allowing for cost-effective options. Deposit taking institutions organize training to sensitize members on methods of product development or refinement of existing products using a systematic method of outlined steps which include design and concept testing. Members come with unique needs which deposit taking Saccos must meet by developing innovative products within the sector to withstand competition. Demands for new loan products increases to a level that requires partnerships with other alternative financing organizations. In developing new products, institutions are advised to check whether the needs can be satisfied by refining existing products or by developing new product; also avoiding the product proliferation (Fabiano, Ferraresida & Gerharda, 2016).

Yeronet and Seyfang (2010) carried out an analysis on the disbursement process of the credit portfolio. It revealed that reorganization and centralization of the activities and processes involved with credit portfolio administration should take place in the loan department. Appraisal procedures and credit policies are strictly observed, to avoid delay in loan processing. Savings deposits are essential to maintaining a strong credit portfolio and obtain the necessary liquidity levels. The quality of the savings deposits, the loan assessment and repayment methods determine the proportion of depositors to borrowers in the organization. In deposit taking organizations, borrower dominated Saccos tend to put deposits at risk, discourage net depositors, and encourage those looking for cheap loans, therefore keeping those organizations borrower dominated. Saccos with high quality deposit services motivate net depositors as well as net borrowers.

Pana and Mukherjee (2010) in their structural analysis compared risks associated with the maintenance of many small accounts and then a few big accounts that provide savings deposits for borrowing. Compared to big accounts, the many small accounts are stable as long as depositors have confidence in the safety and soundness of the

organization. On the other hand, the big accounts are more rate reactive and fluctuate rapidly with changes in market interest rate levels. Most liquidity risks start not from the many small liquid accounts, but from the fewer big accounts. Account closure of one or more of these accounts leave the deposit taking institution with less liquidity. A huge liquidity reserve rate for big accounts offsets for the higher risk of the growing deposits in the big accounts.

Yeronet et al.(2010) in his study stated four steps to streamline portfolio loan administration through exception tracking. One must systematically outline document exceptions. Frequent, systematic and proactive outlining of document exceptions is the best way to prevent documents from missing out, spreadsheet stored data is prone to more manual and formula errors than if the data were stored in the main or other automated software systems used for analyzing borrower financial data; Next step is to resolve document exceptions. An automated loan management system that produce and track member correspondence and reduce the administrative tasks makes the process of resolving exceptions more cost effective. Ensuring documentation remains relevant and current throughout the loan term is another step. Having a credit administration system that bridges the core processing system and underwriting systems allows an organization to conduct post-closing reviews and periodic checks more easily by generating client emails, letters or phone lists automatically.

Lastly patterns are analyzed in document exceptions. Identifying patterns point out problems in the initial process, which may suggest changes that make credit approvals more ideal. Identifying patterns also help single out staff, business units or geographic locations that strengthen documentation compliance. Examiners understand the relevance of document exceptions in evaluating the quality of the loaning policies and loan portfolio administration. They note that non-performing loans reveal themselves in a number of ways and are able to identify potential problem loans during examinations by finding evidence of improper or inadequate security on credit documentation (Yeronet et al., 2010).

2.4.3 Risk management and member advancement

Magali (2013) study 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 financial performance. Servon and Kaestner (2008)posits that deposit taking Saccos address member demands by mobilising 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) study 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 financial 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 to establish 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 to legal and regulatory practices contributed further to the existing risks. The study showed the various measures that maybe implemented for effective risk management. These are the 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 established 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 has 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).

2.4.4 Voluntary savings and member advancement

Byrne (2009) researched on the benefits of voluntary savings are revealed that these are deposits a member contribute to the deposit taking Sacco by way of investing for future

use. Voluntary savings are characterized by convenience and the ability to deposit and withdraw at will and earn market driven rates of interest on accumulated deposits. The study revealed that voluntary savings requires the creation of safe and sound organizations where depositors put their deposits as they expect to receive the full amount of their deposits, together with interest earned, on termination of membership. It involves developing viable products to satisfy the member demand for voluntary savings services and marketing those products to depositors of different income levels. The study concluded that savings contribution is a way of capturing voluntary savings deposits, protecting them, managing them, and using them to advance loan portfolios

Dixon (2006) examined the importance of voluntary savings in deposit taking Saccos. The study indicated that voluntary savings is the same or more important than the provision of loan services. Deposit taking members subscribe to the institutional capital in the Sacco when they join. With the subscription to the institutional capital, members gain access to the savings services provided by the deposit taking Sacco. Saccos around the world provide deposit services to their members and customers on a reliable basis. By providing services to members and customers of different income groups, deposit taking Saccos accumulates deposits which are stable, low cost source of financing for the growing loan portfolios. These finances are lent to members to invest in productive investments in agriculture, education, housing, and small businesses in the rural and urban areas

Brown and O'Connor (1999) explored the procedures to manage savings deposits. He realized that organizations define their savings product offerings and implement policies and procedures to manage those products. Deposit contribution is seen as a demand driven activity by members who contribute for their future investment. The study revealed that a deposit taking Sacco must first convince depositors that their deposits are safe and well managed. Thereafter the deposit taking Sacco designs and offers deposit products that satisfy the service demand of members in the service sector. The study explored the tradeoff between liquidity (access) and returns (compensation) and

suggested that organizations must offer a range of products to satisfy the different demands of depositors.

Branch and Cifuentes (2001) examined how deposit taking Saccos design their savings products. The examination found that deposit taking Saccos use member relationship management software and databases to capture this kind of information and use it to design successful products and improve member services. What most differentiates deposit taking Saccos from other non-bank financial bodies offering small credit services is their ability to mobilize large number of small, voluntary deposit accounts. It was revealed that it is the simultaneous presence of depositors, who provide the finances, and borrowers, who borrow the loans, which forms the basis for a reliable and balanced financial intermediary.

WOCCU reports (2009) revealed that deposit taking Saccos that combine sound financial disciplines, depositor friendly product offerings, and recruitment drives satisfy member demands for deposit services and quickly generate high levels of liquidity. The liquidity from savings deposits provide Saccos with the funds to meet member loan demand and provides the organization with cheap and long term source of self sustaining financing. Clearly put, the deposit taking Saccos emerge as true financial intermediaries, raising savings deposits to build their loaning portfolios (Cohem,2007).

Corr (2006) discovered that before involving in planning member deposit mobilization, an organization must design prudential financial management disciplines as standards, well- understood and staff acceptable practice. Deposit taking Saccos should demonstrate strong financial management of their own deposits, beyond merely meeting basic requirements of solvency. Further it was revealed that deposit taking Sacco maintain the main disciplines of delinquency control, loan loss provisions, liquidity reserves and capital reserves in order to protect member deposits. These disciplines are formalized in policy and implemented in practice. Financial disciplines work together

and are mutually reinforcing; as such, they are implemented as a combined system, not in a stand-alone manner that addresses some risks but not others.

Yeron (2012) in his study on the value of savings deposits observed that deposit taking Saccos must defend the value of the deposits captured. Provisions for loan losses provide the first line of defense against foreseeable risks, allowing a deposit taking Sacco to protect itself from loan losses that can be predicted by the monitoring and aging of delinquency. The WOCCU Standards of Excellence demand that deposit taking Sacco provision for 100% of loans delinquent more than 12 months and 35% of loans delinquent less than 12 months. Saccos should write off loans delinquent for periods over 12 months. The total outstanding principal balance of a loan should be classified as delinquent (portfolio at risk) at 30 days past due (Worthington, 2010).

Servon and Kaestner (2008) explored other lines of defense to protect savings deposits. The study revealed that reserves or institutional capital, provide a second line of defense against unexpected losses which reduce the level of savings. When a deposit taking Sacco build institutional capital or retained earnings, then these amounts provide security during a period of economic crisis or during a banking crisis. Deposit taking Sacco build and maintain capital reserves and retained earnings at 10% of total assets. Institutional capital in deposit taking Saccos, or investment in stocks in other privately owned savings institutions, are a third line of defense against external losses that can be utilized in extreme cases to avoid reducing the value of member deposits (Branch & Linares, 2001).

2.4.5 Regulatory Environment and member advancement

Branch and Cifuentes (2001) specified that Savings deposits a contract between parties; the deposit taking Sacco receiving the deposits and the member placing deposits in the Sacco. In this case, deposit services operate within a well-designed legal framework that identifies which organizations, under which criteria are able to receive deposits from

depositors or from the public. The legal framework point out what recourse depositors have to recover their deposits from organizations in times of disaster. Organizations that mobilize savings deposits are supervised by a regulatory authority responsible for supervision of the Sacco sector.

Murray and White (2001) studied on the effect of supervision on deposit taking Saccos. The study found that effective supervision requires a very effective legal system, formalized audit requirements, supervisory monitoring capacity, an established regulatory framework, and authority to enforce the law. Major distinctions in the quality of management and deposits protection arise when comparing Saccos supervised by the formal financial sector regulator with those not supervised by the regulator. The deposit taking Saccos supervised by the regulator always institute stronger financial disciplines. At the same time, many deposit taking Saccos operate in regions where they are poorly supervised by cooperative departments or non-financial ministries. In such cases, the deposit taking Sacco is responsible for adhering to the financial disciplines necessary to manage deposits safely, monitoring its own financial performance, and advocating for greater commitment and capacity for supervision on the part of the government regulator.

Chua et al, (2014) researched on the design and the management of prudential standards. The research pointed that before engaging in deposit taking, a deposit taking Sacco develop prudential financial management disciplines as standards, and well understood practices. This development of disciplines means more than merely meeting basic requirements of liquidity. Deposit taking Saccos develops the core disciplines of delinquency control, credit loss provisions, liquidity reserves, control of nonearning assets, profitability, and capital reserving in order to protect member deposits. They are developed as a combined system, not in a separated method that addresses some risks but not others.

Can and Gozgor (2018) gave an overview of the PEARLS financial performance monitoring system, established by WOCCU to work as management guidance for Deposit taking Saccos and other deposit organizations. PEARLS is also a supervisory tool for boards of directors and regulators to use in monitoring financial operations. PEARLS are used to compare and rank organizations; it provides comparisons among peer organizations in one nation or across nations. The system uses a set of financial ratios to measure key areas of Deposit taking operations: Protection, Effective financial structure, Asset quality, Rates of return and costs, Liquidity, and Signs of growth. It provides performance standards for the key disciplines of prudent financial management.

Corr (2006) examined the application of prudential disciplines in deposit taking Saccos. The examination revealed that the savings depositors give pressure upon the board and management to observe the prudential disciplines, keeping the organization relatively balanced. This balance in governance is achieved in part by the mix of deposits and credit offerings. It is constrained and guided by the rules and bylaws which include operational responsibility and flexibility for management, establishment of prudential standards, accountability of executives for financial performance, oversight responsibilities of directors, and controls over conflicts of interest. It was concluded that directors and executives are forced to operate according to sound principles, including adequate capital reserves, credit loss provisions, and liquidity reserves in order to protect member deposits and the existence of the organization.

Cuevas and Fischer (2006) researched on credit protection in deposit taking Saccos. The study found that when an organization mobilizes savings deposits, liquidity increases and those funds are lent out as credit to members. It is crucial that Deposit taking Saccos place strong policies, methodologies, and practices for loan screening and risk analysis so that the credit financed by

Deposits are collectible. Risk management includes strict delinquency monitoring, reserve provisioning, and collections, as well as effective risk analysis and credit

screening. A deposit taking Sacco builds lines of defense to protect client deposits. Loan loss provisions provide the first line of defense. Risk of loss is observable directly in the defaulters of the credit portfolio

Churk (2015) studied on credit recovery systems. It pointed that if nonperforming credits are not recovered, then the deposits that financed those credits are lost. The deposit taking Sacco make provisions from income in the amount that is required to replace the deposits, as a percentage of defaulted credit and depending on the age of the defaulted credit. Beyond credit default, there are risks that are not revealed: risks that maybe due to unexpected losses or systemic shocks. The Sacco builds reserves retained from earnings or “institutional capital” as a second line of defense to settle losses before they can affect the value of deposits. Deposit taking Saccos create a third line of defense with the shares that members invest as risk equity in the organization. If provisions and reserves are not sufficient to absorb losses, then shares absorb the losses before reducing the deposits (Branch & Cifuentes, 2001).

Emmons and Schmid (2004) explored the existence of risk in deposit taking business. The study revealed that it is untrue to claim that there are no risks in the Sacco sector today and that we expect the regulator to address all the likely problems faced in an existing dynamic industry in a few years. Regulatory actions doubtless continue to be seen over the next periods as more organizations are brought under regulatory control. Risk is pervasive in financial systems globally. The regulator of the Sacco subsector is constantly reviewing the ways in which to manage risk without undermining the financial system to the extent where it can no longer perform its essential economic function. The study further revealed that the regulation of Deposit taking Saccos is not an event but a long-term process. There is little doubt that further developments are needed. The regulatory body identified the requirements for stronger powers which included the strengthening of various standards on governance. It is believed in the whole Sacco sub sector that good regulation is not a threat but rather provides the

foundations from which a stronger, more sustainable sector emerge (Eric Boyd & Kannan, 2018).

2.4.6 Member Advancement

Esho, Kofman and Sharpe (2005) conducted a study on the deposit taking Saccos growth to justify member advancement. The study revealed the growth witnessed in deposit taking Saccos since they were registered; Growth in deposits volume and in the number of depositors and customers served. The fact that total deposits grew many times as fast as the number of members, suggests that the deposit taking Sacco have been successful both in registering new members and in deposit accumulation. The dramatic increase in total deposits demonstrates that the organizations have been successful in building the trust of new and existing depositors. Further growth is seen when an organization develops the financial disciplines necessary to build a sound organization where depositors entrust their deposits. The study concluded that, Deposit taking Sacco hold to the principle that internally generated deposits bring an independent and sustainable supply of finances that are invested in the Sacco sub sector (Fabiano et al., 2016).

Kempton et al. (2000) studied on the economic contribution of deposit taking Saccos. The study revealed that deposit taking Saccos is fundamental to reliable economic advancement. They are the most observable source of finance for small business startup and growth. Deposit taking enables families to stable consumption in the event of irregular income flows, to invest in assets for the future, to invest in education, and to better prepare for un predictable events. Onchangwa (2012) conducted a study to review whether deposit taking Saccos has any relationship with member investment culture in Kenya. He revealed that investment plays a major role in supporting growth and advancement of the economy. High rates of investments depend on high rates of deposits. They also argue that a high saving country accumulates assets quicker and thus grows quicker than a low saving country.

ACCOSCA (2011) categorized deposit taking Saccos as vehicles for economic growth through deposits and investment. However, the government of Kenya recognizes deposit taking Saccos as the main contributor to the country development with the national population approximately 44million. Whether in developing, transitioning, or developed nations, the purpose of a deposit taking Saccos remains the same: to provide depositors with financial services to improve their economic and Social conditions through asset accumulation and income growth (Feinberg, 2001).

In Kenya, the effect of licensing deposit taking operations, in the year 2011 witnessed the continued growth of the sector on various key areas such as membership and advancements in technology; Thus facilitating service delivery and increased number of branches. Key definitive milestones in efficiency and service delivery profoundly transformed the sector both in the short and medium terms. Deposit taking 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 nation. Deposit taking Saccos accumulated assets to the tune over 171 billion (Fessler et al., 2012).

SASRA reports (2013) indicated that all the counties registered growth in branch network. The branch distribution reflected the level of economic activities across the regions. Deposit taking Saccos embraced the use of technology to deliver services to depositors. 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 phone to deliver financial services made the software vendors in the Sacco subsector to partner with the telecommunications companies to integrate mobile solutions to their core systems(Friedrich, 2013).This notable advancement facilitates deposit taking Sacco members to withdraw or deposit money into the front office account, make enquiries on the accounts, get notifications on

their loans as well as pay for bills conveniently without having to travel to Front office premises. Deposit taking Saccos in Nairobi city county, Kenya estimated at 42 accounts for over 70% of the total assets and deposits in the entire subsector. They are viewed as salary based Saccos which provide stable source of deposits and market to lend. The same trend is replicated of the savings deposits and assets (FSD, 2012).

The trend however reverses when it comes to membership with Nairobi city county 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 is 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 (MOCD& M, 2013).

2.5 Critique of the existing literature

This study used data from Kenya which is a developing country. The deposit taking Sacco model on financial empowerment of member advancement as presented by Woccu evolved in the western countries where credit unions are more vibrant and advanced in terms of technology, Governance, level of operations, product awareness and financial discipline. This study uses data from a wider scope, both local and global to examine the effect of financial empowerment on member advancement of deposit taking Saccos in Nairobi city county, Kenya.

Evidence produced by Brunnermeier (2009) indicate that liquidity constraints and low deposit levels in deposit taking Sacco are associated to the low levels of funds available for lending. Servon and Kaestner (2008) in the research titled “The Effects of Dividend

Policy on growth of deposit taking Saccos in Kenya” pointed that Saccos pay high dividends and fail to transfer part of the surplus to the revenue reserve; This conflict with the regulation to maintain reserves for institutional growth. This study strives to observe regulatory compliance of deposit taking Saccos on financial empowerment of member advancement.

Lyons and Neelakantan (2008) revealed that deposit taking Saccos operate in an environment full of risks; both internal and external.. Risks, if not mitigated, can bring down the operations of an institution. The research did not address the methods of dealing with risk. The current study commits to widely address risk mitigation methods that puts in place a wholistic risk management program taking into account the effects of in relation to deposit taking Saccos on financial empowerment of member advancement.

A study by Worthington (2010) adds that financial empowerment has strong relationship with member advancement particularly when a deposit taking Saccos develops viable savings products that create sufficient funds for advancing member loans. Loans advanced from Saccos are invested by members to improve their social and economic standards of living. The study failed to clearly point out the available financial avenues to fund the growing loan demand. The current study endeavors to unveil sustainable sources of funds to reduce the existing gap that affect financial empowerment on member advancement of deposit taking Saccos in Kenya.

2.6 Research gaps

Many scholars: Richardson & Oliva (2015), Birchall (2016), Burger & Zellmer (2017), Freidrich Reifeisen (2014), Branch (2015) and Chaves (2015), Burger & Zellmer (2015), Freidrich Reifeisen (2013), Kempson (2017), Yeron et el.(2016), Birchall (2016), FSD(2018), ACAL(2016), studied on growth in membership, partnerships with local financiers, the establishment of Sacco inter lending facility, Central finance fund

by the Sacco umbrella body, interest rates paid on member deposits, interest rates received on loans, credit risk management as the Sacco specific factors affecting deposit taking member advancement; and Deposits mobilization, Market outreach, Credit portfolio quality, and liquidity levels(external factors) affecting deposit taking saccos member advancement.

However, other critical factors example Financial services, Credit portfolio administration, Risk Management and Voluntary savings were not included hence informing the current study. Studies by Branch (2018), Chaves (2016), Birchall (2016), FSD (2017), ACAL(2017), majorly used panel data and quantitative research designs. The current study filled the gap by applying cross sectional survey research design. Further previous researches did not consider the moderating effect of Financial regulation (Accountability and Capital accumulation) on the relationship between determinants and deposit taking Saccos member advancement in Kenya hence filling this research gap.

2.7 Summary

The existing literature review point out that deposit taking saccos main objective is to provide financial services to their members to improve their economic and social status through asset accumulation and income growth. Various scholars brought forth different perspectives concerning deposit taking Saccos but all point to their ability to inspire member advancement in social and economic growth. Though, the study had to depend a lot on the existing body of literature for the identification of variables as well as for developing logical argumentation for the inter relationships among different variables in the financial empowerment of member advancement; The theoretical and empirical literature pointed on practical cases on the effects of financial empowerment on member advancement.

The discussions above indicate strong relationships between the dependent and independent variables; as demonstrated by the accounting and reporting transparency theory, the financial discipline and prudential standards theory, the financial restructuring theory, savings mobilization theory, the aggressive market penetration and expansion of new market niches theory. On the other hand, the effect of financial empowerment on member advancement is justified by the operating efficiency theory, the physical image enhancement theory and the product diversification theory. This study builds on these theories to determine the effect of financial empowerment on member advancement.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter described the research methodology for the study. It described the research design, population of study, sampling methodology, data collection and analysis procedures. Data sources and collection techniques, questionnaire design and pre-test were also covered in this chapter. Further, the chapter discussed operationalization of the research variables, reliability and validity tests of the instruments. The chapter ended with a discussion of the data analytical techniques adopted for the study.

3.2 Research Design and Philosophy

3.2.1 Research Philosophy

A research philosophy is a belief about the way in which data about a phenomenon is gathered, analyzed and used. The term epistemology (what is known to be true) as opposed to doxology (what is believed to be true) encompasses the various philosophies of research approach. The purpose of science, then, is the process of transforming things believed into things known: doxa to episteme. Two major research philosophies have been identified in the Western tradition of science, namely positivist (sometimes called scientific) and interpretivist (also known as antipositivist) (Galliers, 1991).

This study adopted a positivism philosophy. Positivists believe that reality is stable and can be observed and described from an objective viewpoint (Levin, 1988), i.e. without interfering with the phenomena being studied. They contend that phenomena should be isolated and that observations should be repeatable. This often involves manipulation of reality with variations in only a single independent variable so as to identify regularities in, and to form relationships between, some of the constituent elements of the social

world. Predictions are made on the basis of the previously observed and explained realities and their inter-relationships. "Positivism has a long and rich historical tradition. It is so embedded in our society that knowledge claims not grounded in positivist thought are simply dismissed as scientific and therefore invalid" (Hirschheim, 1985, p.33). This view is indirectly supported by Alavi and Carlson (1992) who, in a review of 902 IS research articles, found that all the empirical studies were positivist in approach. Positivism has also had a particularly successful association with the physical and natural sciences.

3.2.2 Research Design

Kothari (2004) explained research design as the conceptual structure within which research is conducted. It constitutes a framework for the collection, measurement and analysis of data. The study adopted a cross sectional survey research design. Zikmund (2003) alluded that surveys provide quick and accurate means of accessing information on a population at a single point in time. A descriptive cross-sectional survey collects data to make inferences about a population of interest and is described as snapshots of the populations from which researchers gather data. A survey assists the researcher to establish whether relationships exist between variables, depending on the resources available and the target population (Bhattacharjee, 2012).

A cross-sectional survey affords the opportunity to capture a population's characteristics and test hypotheses quantitatively and qualitatively. Consequently, the researcher has no control on the variables thus cannot manipulate them making it inappropriate to use other research designs such as experimental research design (Kothari, 2003). A descriptive cross sectional survey research design was found appropriate in this study because, the study seeks to test the effects of financial empowerment on member advancement of licensed deposit taking Saccos in Nairobi County Kenya using data collected at the time of the survey. Local studies which have used the same research design include Gogo & Oluoch (2017), Thuo (2011).

3.3 Target Population

The population of interest was composed of all licensed deposit taking Saccos in Nairobi City 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. The categorization is shown in table 3.1 below.

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. The study sought to examine the effect of financial empowerment on member advancement of licensed deposit taking Saccos in Nairobi City County.

Table 3.1: Target population

Size of Sacco	Number of Saccos
Large	4
medium	18
Small	20
Total	42

3.4 Sampling frame

A sampling frame has the property that the researcher can identify every single element and include any in the sample (Saunders et al., 2007). The most straightforward type of sampling frame is a list of elements of the population with appropriate contact information. The sampling frame was selected from the category of respondents who possesses the required information.

The sampling frame composed of 42 large, medium and small licensed deposit taking Saccos in Nairobi City County that had contacts in the SASRA published report, 2015.

3.5 Sample and Sampling Technique

Three Saccos had been excluded from the sampling frame as they had only been issued with provisional registration for noncompliance with the requirements for capital adequacy. As a result of the small sample of the licensed deposit taking Saccos in Nairobi City County (39) summarized in table 3.2, It was possible to collect data from the entire population and hence a census inquiry was used. A census is suitable when the universe is small and can be presumed to yield the highest accuracy as no element of chance is left since all items are covered (Kothari, 2004).The approach had been used in past studies with similar sampling frame (Creswell, 2014).

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 3.2: Sample Size

Size of Saccos	Number of Saccos	Sample
Large	4	4
medium	18	18
Small	20	17
Toatl	42	39

3.6 Data collection Methods

Based on the objectives of the study, a research generated questionnaire and a research interview guide were developed to aid in collection of data from the respondents. Each objective was considered when developing the questionnaire. The variables were modified with the aim of addressing the specific research objectives and context using the key-informant method. The Chief executives, the Deputies and the department heads were the key informants in each SACCO as they were deemed to possess the specific information of SACCO Financial Empowerment on member advancement.

The interview guide was used for in-depth qualitative data collection on various themes on the study. These two instruments were administered concurrently (Creswell, 2013). Only one respondent was interviewed in each SACCO. While some previous researchers supported the use of multiple informants, other scholars found that single informants provide data that are reliable and valid as multiple informants (Russel, 2013).

3.7 Data Collection Procedure

Firstly, the researcher obtained a letter from the university to enable her get an official research permit from the National council for science, technology and innovations which would then issue a research authorization permit. The questionnaires were then administered to each respondent physically. On line questionnaires were also administered to respondents who could not be physically reached. Two research Assistants; the university students were employed to assist the researcher in dropping the questionnaires to the respondents with instructions on how to fill them. Introduction letter (Appendix 1) accompanied each questionnaire explaining the objectives of the study and assuring respondents of strict confidentiality in handling their responses. All the questionnaires were self-explanatory.

3.8 Pilot study

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. The respondents were derived from deposit taking Saccos in Kiambu County in the population with similar characteristics, but not those that were used in the main study. Subjects from the actual sample were not used in the pre-test. Procedures in pre-testing the questionnaire were similar to those that were used in the actual study. This helped in clarifying questions and in refining the data analysis methods (Mugenda & Mugenda, 2004).

3.8.1 Validity of the Research Instrument

Cooper and Schindler (2003) defined validity as the degree to which results obtained from the analysis of the data actually represent the phenomenon under study to assess the validity. To ensure validity of the research instrument, the researcher used expert raters and research supervisors. The rated findings were used to calculate content validity index (CVI) using the following formula;

$$CVI = \frac{K}{N}$$

Where;

K = Total number of items in the questionnaire declared valid by both raters/supervisors.

N = Total number of items in the questionnaire.

The computed CVI was compared with the standard CVI of 0.7 for validity. Further, the questionnaire was also pre-tested against coherency and comprehensiveness through pilot study method.

3.8.2 Reliability of the Research Instrument

Reliability in a cross sectional survey research is the degree to which the research conclusions may be applied to other specific settings, people, time periods, context and others (Bhattacharjee, 2012). Internal consistency technique was used to establish reliability of the instruments for this study. Cronbach's Coefficient Alpha was used to determine how the measured concept under the study correlated among the different items in the provided rating scale and established a measure of 0.844.

Reliability statistical score of 0.70 or higher which is the rule of thumb for better instrument was used when assessing the reliability of the instruments in this study (Mugenda & Mugenda, 2003).

Alpha coefficient ranges in value from 0 to 1 and the higher the score, the more reliable the generated scale. Internal consistency was tested for the items in parts 11- part V11 of the questionnaire. Based on these recommendations, the research instrument was reliable and had adequate internal consistency to collect field data.

3.9 Data analysis and presentation

According to Mugenda and Mugenda (2005), data analysis means categorizing, ordering, manipulating and summarizing of data to obtain answers to research questions. The data collected was checked to ascertain that it was complete. It was then organized and summarized by the researcher. Quantitative data was edited before compiling. Coding was done to ensure that each question had been answered. The data was entered and analyzed by both descriptive and inferential statistics using Statistical Package for Social Sciences (SPSS) version 21 and Microsoft Excel.

Descriptive analysis was conducted to present the main characteristics of the sample. To test the hypotheses, correlation and regression analyses were computed to determine the expected relationships between accessing financial services, credit portfolio

administration, service delivery, voluntary savings, financial regulation Factors and member advancement. The regression analyses provided estimate equations to predict the magnitude of the dependent variable and provide values for the predictor variables. Pearson Correlation coefficient (r) was derived to show the nature and strength of the relationship between the variables. Coefficient of determination (R^2) was used to measure the amount of variation between the study variables. The data was then presented through tables, and narrative analysis. The presentations were done in line with research objectives. Testing for significance of the hypotheses was done at $\alpha < 0.05$ alpha level.

3.9.1 Statistical model

Multiple 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 variables (X) with (e) representing the error term (cooper and Schindler, 2010).

$$Y = B_0 + B_1X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + e$$

Where:

Y = Member Advancement

X_1 =Financial services

X_2 = Credit portfolio administration

X_3 = Risk Management

X_4 = Voluntary savings

β_0 =Constant

$\beta_1, \beta_2, \beta_3, \beta_4$, are regression coefficients for estimation

e =Error term reflecting other factors

3.9.2 Moderated Regression Analysis

Table 3.3a: Moderated Regression Analysis

Variables	FS	CPA	RM	VS
Financial services	$\beta_{1z}X_{1z}$			
Credit Portfolio Admin		$\beta_{2z}X_{2z}$		
Risk Management			$\beta_{3z}X_{3z}$	
Voluntary Savings				$\beta_{4z}X_{4z}$

Moderator: Regulatory environment

Moderator variable is one which specifies the magnitude of the relationship between a predictor and a criterion variable (Cooper & Schindler, 2003). According to Bryman and Bell (2011), a moderating variable is one that has a strong contingent effect on the relationship between independent and dependent variable. The effect of a moderating variable on the relationship between independent and dependent variable in statistical terms is termed as interaction (Kothari, 2014). The researcher adopted a stepwise regression to derive the findings. The following regression equation was applied.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_{1z}X_{1z} + \beta_{2z}X_{2z} + \beta_{3z}X_{3z} + \beta_{4z}X_{4z} + e$$

Where:

Y = Member Advancement

X_1 = Financial services

X_2 = Credit portfolio administration

X_3 = Risk Management

X_4 = Voluntary savings

β_0 = Constant

$\beta_1, \beta_2, \beta_3, \beta_4$, are regression coefficients for estimation

$\beta_{1Z} - \beta_{4Z}$ = Regression Coefficients for moderator

e = Error term reflecting other factors

3.9.3 Variable Definition and Measurement

(a) Dependent Variable

Member Advancement was considered as the dependent variable. In previous studies it was measured by return on investments (ROI), which was explained by Damar and Hunnicutt (2010) that it is the sum of the expected rate of return multiplied by the probability under different states of the economy. It represents the actual return earned on the invested funds by the deposit taking Sacco members. According to Brian and Klaehn (2012) ROI reflects how effectively the deposit taking Saccos are able to invest accumulated deposits for the members.

On the other hand, growth in income and membership were also used to measure Member Advancement. Dixon (2006) explained growth in income and membership to mean the differences derived from the income and membership figures in the financial

statements of two comparative years, divided by the figures of income and membership of a previous year. Higher the income and membership growth figures reflects the ability of the deposit taking Saccos to generate income by lending out the funds available to the members. Growth in membership shows the well planned outreach programmes to attract the financially excluded members. This shows how efficient the Sacco funds are used to generate income and reach out to the un served members.

Previous studies used secondary data to measure performance of particular Saccos in question. This study used both primary data as well as secondary data. The primary data measured by a five point likert scale having the ratings ranging from 5 for strongly agree and 1 for do not know, captured the managerial views about the changes in their performance in the past three years. From the secondary data the information collected helped confirming the results obtained from the primary data.

(b) Independent Variables

i. **Financial services:** A structured standard questionnaire was used to solicit responses from deposit taking Sacco managerial staff on the effect of Financial services measured by the cost of Financial services and the products offered (Ebisa, 2012). The tool solicited responses on a five (5)-point Likert scale with the following verbal anchors: strongly agree, agree, disagree, strongly disagree and Do not know.

ii. **Credit portfolio administration:** to achieve this objective, opinions were collected from deposit taking Sacco managers in terms of whether credit policy is well observed in the organization. Credit portfolio administration is measured by the credit policy and the amounts of credit approved for the members (Magill, 2011). The tool solicited responses on a five (5)-point Likert scale with the following verbal anchors: strongly agree, agree, disagree, strongly disagree and Do not know.

iii. **Risk Management:** primary data was solicited to establish whether deposit taking Saccos member advancement is affected by Risk Management. This was measured by a

combination of the external and internal risks (Essendi, 2013). The tool solicited responses on a five (5)-point Likert scale with the following verbal anchors: strongly agree, agree, disagree, strongly disagree and Do not know.

iv. **Voluntary savings:** the objective was to examine whether voluntary savings had an effect on deposit taking Saccos member advancement. This was measured by the interest return on the accumulated savings and the diversification of products (Fernandes, 2014). The tool solicited responses on a five (5)-point Likert scale with the following verbal anchors: strongly agree, agree, disagree, strongly disagree and Do not know.

(c) Moderating Variable

Financial Regulation: the influence of Financial Regulation on the independent variables in relation to member advancement. Areas measured include the accountability of the deposit taking Sacco finances and the capital adequacy levels which measured the health of sacco's finances.

3.9.4 The hypotheses

The hypotheses set out in table 3.3 were used to analyze the findings of this study.

Table 3.3b: Hypotheses and statistical tests

Hypothesis	Type of Analysis
H₀₁: Financial Services have positive effect on member advancement	<ul style="list-style-type: none"> • Multiple Linear Regression and • Pearson Correlation Coefficient
H₀₂: Credit Portfolio administration has significant effect on member advancement.	<ul style="list-style-type: none"> • Multiple Linear Regression and • Pearson Correlation Coefficient
H₀₃: Risk management has significant relationship on member advancement.	<ul style="list-style-type: none"> • Multiple Linear Regression and • Pearson Correlation Coefficient
H₀₄: Voluntary Savings Significantly influence member advancement.	<ul style="list-style-type: none"> • Multiple Linear Regression and • Pearson Correlation Coefficient
H₀₅: Regulatory environment by the regulatory authority significantly influence member advancement.	<ul style="list-style-type: none"> • Multiple Linear Regression and • Pearson Correlation Coefficient

3.9.5 Diagnostic Tests

Normality and Multicollinearity tests were performed to check the assumptions of regression analysis. Normality tests determined whether data sets were well modeled by a normal distribution. This study applied Kolmogorov-Smirnov and the decision rule was that if the p- value obtained was less than 0.05 data was said to be normally distributed. Multicollinearity was tested using Variance Inflation Factor (VIF) which was not to be more than 10 while tolerance was not to be less than 0.1 (Feinberg, 2001). Besides the multicollinearity was also tested using the rule of thumb correlation coefficient $r > 0.9$.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the research findings and results of the study on the effect of financial empowerment on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya. The data collected was coded, cleaned, analyzed, presented, discussed and inferences made in an attempt to address the specific objectives of the study. Descriptive and inferential statistics were used to analyze the data on each variable. Data was further presented in the form of frequency distribution tables to facilitate description and explanation of the study findings. The inferential statistics were conducted for the purposes of testing hypotheses that were stated in chapter one and determining the relationship between independent, moderating and dependent variables.

4.2 Response Rate

The researcher issued 42 questionnaires to the Chief Executive Officers of the deposit taking Saccos in Nairobi City County, Kenya. All the 42 questionnaires were filled in by the Chief Executive officers, their deputies and the department heads and returned. This represents a 100 percent response rate which was excellent and representative. Bryman and Bell (2011) stated 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 intents and personal administration of questionnaires by the researcher and research assistants ensured good response rate.

4.3 Pilot results

Table 4.1: Reliability Tests of the factors

Variables	Cronbach's Alpha (α)	Items
Financial services	0.854	6
Credit portfolio admin	0.882	8
Risk Management	0.821	9
Voluntary savings	0.886	8
Regulatory environment	0.852	5
Member advancement	0.768	6

The study measured the reliability of the questionnaire through the use of Cronbach Alpha (α) which established a threshold at an alpha value of 0.844 (Creswell, 2005). Alpha coefficient ranges in value from 0 to 1 and the higher the score, the more reliable the generated scale is (Russel, 2013). The findings as shown in Table 4.1 shows reliability test for Financial services of 0.854, Credit portfolio administration of 0.882, Risk management 0.821, Voluntary savings 0.886, Regulatory environment 0.852 and Member advancement 0.768. These findings indicate that internal consistency measures of the variables were acceptable and valid since the Cronbach Alpha coefficients exceeded the pre-determined threshold of 0.7 as recommended by Mugenda and Mugenda (2004), who stated that scales of 0.7 and above indicate satisfactory reliability.

4.4 Background Information

This section analyzed the background information which was considered important in this study. This includes the respondents' gender, position held, length of service, highest level of education, and number of branches held.

4.4.1. Gender distribution

Table 4.2: Gender distribution

Gender	Frequency	Percentage
Male	28	67
Female	14	33
Total	42	100

The study sought to establish the gender distribution of the respondents. As presented in Table 4.2, the majority (67%) of the respondents were male, and 33% were female. These results were consistent with the findings of Birchall (2004) where it was 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.

4.4.2 Position in the SACCO

The researcher sought to establish the position of the respondents in the Sacco and whether this had an effect on member advancement. The results of Table 4.3 indicate that 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, being 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.

Table 4.3: Position in the SACCO

Position	Frequency	Percentage
Chief executive officers	39	93
Others	3	7
Total	42	100

4.4.3 Number of years served

The study sought to establish the number of years served by the respondents in the Deposit taking Sacco subsector. The purpose was to assist the researcher in gaining insight on the chief executive's experience in deposit taking decisions.

Table 4.4: Number of years served

Number of years served	Frequency	Percentage
>6	23	54.8
4-6	18	42.9
<1	1	2.3
Total	42	100

The results found in Table 4.4 established that 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% had 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 contribution to the performance and growth of the

organizations. This aligned with the 2016/2017 performance contracts of the public institutions.

4.4.4 Level of education

Table 4.5: Level of education

Level of education	Frequency	Percentage
Masters	18	43
Bachelors	21	50
Diploma	3	7
Total	42	100

The study sought to establish the education level of the respondents and whether the education level can determine member advancement. The findings of Table 4.5 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 majority of the respondents in the study were degree holders. Therefore they had 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 Sacco should be run by professionals.

4.4.5 Average number of branches

The study aimed at establishing the Average number of branches operated by each deposit taking Sacco in the Nairobi City county, Kenya; and whether those branches had an effect on member advancement.

Table 4.6: Average number of branches

Opinion Statement	N	Minimum	Maximum	Mean	Std. Deviation
Number of branches	42	1	20.00	3.3659	4.35176

The results in Table 4.6 established that the branch distribution among the Deposit taking Saccos in the Nairobi City County Kenya ranged between 1 and 20 with an average mean of 3.3659 and a standard deviation of 4.35176. These results indicate that, due to the big amounts of capital expenditure involved, deposit taking Saccos can only open branches in locations where the feasibility study indicate greater viability of profits. The findings are in line with the Sacco Societies Regulatory Authority regulations (2010) that caution the Deposit taking Saccos to observe the prudence concept before they invest in non-earning Assets

4.5 Descriptive Statistics of Study Variables

This section highlights the testing performed on the financial empowerment variables after which descriptive results were obtained to provide a justification for inferential tests.

4.5.1 Financial services

This was the first objective of the study on which diversification, commonality of products/services tests and descriptive statistics were performed to determine the influence of Financial services on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

a) Diversification of products and services;

The researcher performed tests on diversification of products and services as a Measure of the percentage of product patronage by the members; 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 50 to 75 percent of the members patronize the Sacco products and services.

Table 4.7: Diversification of products and services

Opinion Statement	Frequency	Percentage
Diversification of products and services	42	100

Table 4.7 findings indicated that almost all Saccos are committed to developing diversified products and all the members partook the services which is 100 percent response. The findings were in agreement with Burger and Zellmer (2003) who highlighted the need for deposit taking Saccos to develop diversified products that change financial behavior of the members; and those that are ideally positioned to enhance their financial capability.

b) Common products offered in licensed deposit taking SACCOs

Table 4.8: Common products offered in licensed deposit taking SACCOs

Products	Frequency	Percentage
Savings accounts	42	100
Short term advance	42	100
Salary processing	42	100
Fixed deposit	42	100

Table 4.8 findings indicate that all deposit taking Saccos offer the common financial products and services of operating savings accounts, lending short term advances, processing salaries of their members which are channeled through the Sacco front office by their employers, and maintaining fixed deposit accounts of various categorized periods for their members whose main objective is to invest in such accounts and yield

returns at the expiry of the specified period. The results gave a 100 percent response thus justifying the recommendations of the regulatory Authority for deposit taking Saccos to offer common diversified products / services to facilitate smooth supervision (SASRA, 2012). Therefore, these results provide a justification for further statistical analysis to be conducted hence the statements were retained for analysis.

c). Descriptive Results on Financial services.

This was the first objective on member advancement of deposit taking Saccos in Nairobi City County, Kenya.

Table 4.9: Descriptive Results on financial services

Opinion Statements	SA%	A%	D%	SD%	DK%	Mean	Std.dev
DTS offer products with competitive interest rates	21(50)	21(50)	0(0)	0(0)	0(0)	4.5	0.506
DTS have attracted most of the marginalized clients	13(31)	29(69)	0(0)	0(0)	0(0)	4.4	0.485
Benefit of savings mobilization is the supply of funds for on lending.	15(35.7)	27(64.3)	0(0)	0(0)	0(0)	4.4	0.485
Product diversification meet the needs of the diverse membership	20(47.6)	22(52.4)	0(0.0)	0(0)	0(0)	4.5	0.505
Aggressive marketing avail new products to members of the Sacco	21(50)	20(47.6)	0(0)	1(2.4)	0(0)	4.5	0.552
Front office services of DTS improve its physical image	21(50)	20(47.6)	0(0)	1(2.4)	0(0)	4.5	0.552
Average						3.71	0.514

Table 4.9 shows that 100% of the respondents agreed that deposit taking SACCOs offer savings and loan products with competitive interest rates. Further 100% of the respondents agreed that credit unions have an upper advantage over other providers of

financial services to marginalized clients , 100% of the respondents agreed that benefit of savings mobilization is the supply of funds for on lending, 100% of the respondents agreed that product diversification to meet the needs of a diverse membership, 97.6% agreed that Aggressive marketing avail new products to members of the Sacco, 97.6% of the Front office service in DTS improves its physical image

The mean score for responses for this section was 4.47 which indicate that majority of the respondents patronize the Sacco Financial services as per the below scale, hence making it a key driver of Member advancement. The descriptive results were measured on the scale of 5 - 1, with 5 indicating strongly agree(SA), 4 -Agree(A), 3 - Disagree(D), 2 - strongly disagree(SD) and 1 - Do not know(DK). 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 standard deviation of 0.514 on all the statements indicates that the respondents were moderately distributed.

4.5.2 Credit portfolio administration

To examine the influence of Credit portfolio administration on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya. This was the second objective of the study on which Growth in credit portfolio for the last three years test and descriptive statistics were performed.

a) Growth in credit portfolio for the last three years

The researcher performed tests on Credit portfolio administration as a Measure of credit growth in the last three years, 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 annual growth shows an upward trend of the total amounts lent out to members during each of the financial periods.

Table 4.10: Growth in credit portfolio for the last three years

Year	N	Minimum	Maximum	Mean	Std. Deviation
2012/13	42	14.00	20.00	2.9563	5.12313
2013/14	42	19.00	21.50	3.1993	5.38524
2014/15	42	20.00	21.00	3.4276	5.52975

Table 4.10 findings indicated that there is observed growth in total amounts approved in each of the successive years. Cohem (2005) associates' growth in Sacco loans to the recommended administrative structures by the regulator for Deposit taking Saccos. Within the regulatory framework, the entire loan portfolio is assessed to determine its quality and performance. Deposit taking Saccos is required to undertake reviews of the credit portfolio at least once every quarter of the year. The objective of such review is to make a risk classification of Assets and provisioning.

The results revealed that the average credit portfolio growth in licensed Deposit taking Saccos in Nairobi City, county ranged from Ksh. 2.9563 Billion in the financial year 2012/13 to Ksh. 3.4276 Billion in the financial year 2014/15, with standard deviation ranging from 5.1 to 5.5 in the same period. This confirmed the remarks of Braverman and Guasch (2014) that all Credit Unions have the ability to provide numerous credit products which have a tremendous appeal to members, with exciting features which meet their needs for growth. Therefore, these results provide a justification for further statistical analysis to be conducted hence the statements were retained for analysis.

b) Descriptive Results in Credit portfolio administration

This was the second objective on member advancement of deposit taking Saccos in Nairobi City County, Kenya.

Table 4.11: Credit portfolio administration

Opinion Statements	SA(%)	A(%)	D(%)	SD(%)	DK(%)	Mean	Std.D
DTS Credit policy correspond to prudential standards	23(54.8)	19(45.2)	0(0)	0(0)	0(0)	4.548	0.504
DTS include loan classification in credit management practices	19(45.2)	23(54.8)	0(0)	0(0)	0(0)	4.452	0.503
Saccos in Deposit taking business seek large deposits to cover risks	21(50)	20(47.6)	0(0)	1(2.4)	0(0)	4.390	0.586
Members' financing needs determine credit diversification	16(38.1)	23(61.9)	0(0.0)	0(0)	0(0)	4.381	0.491
DTS loans are transparent, with no hidden fees	16 (38.1)	26(61.9)	0(0)	0(0)	0(0)	4.381	0.491
Credit Functions are centralized in the credit department	11(26.2)	31(73.8)	0(0)	0(0)	0(0)	4.261	0.445
Average						3.692	0.49

Table 4.11 shows that 100% of the respondents agreed that Deposit taking Credit policy correspond to Woccu prudential standards, Further 100% of the respondents agreed that DTS include loan classification in credit management practices, 97.6% of the respondents agreed that Saccos doing deposit taking business seek large savings deposits to cover loan risks, 100% of the respondents agreed that Members' financing needs determine credit diversification ,100% agreed that DTS loans are transparent, with no hidden fees, and finally 100% of the respondents agreed that Credit Functions are centralized in the credit department

The mean score for responses for this section was 3.694 which indicate that majority of the respondents were contented with the Credit portfolio administration as per the below scale, hence making it a key driver of Member advancement. The descriptive results were measured on the scale of 5 - 1, with 5 indicating strongly agree (SA), 4 -Agree(A), 3 - Disagree(D), 2 - strongly disagree(SD) and 1 - Do not know(DK). 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 standard deviation of 0.49 on all the statements indicates that the respondents were moderately distributed.

4.5.3 Risk Management

To determine the influence of Risk Management on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya. This was the Third objective of the study on which the year the institutions opened doors for front office services test and descriptive statistics were performed.

a) 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 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 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 4.12: 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

Table 4.12 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. The 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 (Brian, Gons, & Cifuentes).

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 deposits it taking with a percentage of 16.7. This was the period before the the enactment of the Sacco Act. The year 2011 which is

the year after the coming of the Regulator, indicate 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.

b) Descriptive Results on Risk Management

The third objective was to assess the effect of risk management on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

Table 4.13: 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

Table 4.13 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 influences 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.

4.5.4 Voluntary savings

This was the fourth objective of the study on which Growth in savings deposits test and descriptive statistics were performed to evaluate the influence of voluntary savings on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

a) Growth in savings deposits

The researcher performed tests on Growth in savings deposits as a Measure of savings growth in the last three years, 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 annual growth showed an upward trend of the total amounts saved by members during each of the financial periods.

Table 4.14: Growth in savings deposits

Year	N	Minimum	Maximum	Mean	Std. Deviation
2012/13	42	15.00	21.00	3.1324	5.44836
2013/14	42	19.00	22.00	3.4112	5.73347
2014/15	42	22.00	24.00	3.7297	6.09813

Table 4.14 findings indicated growth in total amounts saved in each of the successive years. Savings deposits are savings a member contribute to the Sacco by way of investing for future use. Growth is characterized by convenience and the ability to deposit and withdraw at will and earn market driven rates of return on funds deposited; and the creation of safe and sound institutions where savers place their deposits with the expectation that they receive the full value of their funds (Byrne et al., 2005).

The results revealed that the average Savings deposits growth in licensed Deposit taking Saccos in Nairobi City County ranged from Ksh 3.1324 Billion in the financial year 2012/13 to Ksh 3.7297 Billion in the financial year 2014/15, with standard deviation ranging from 5.44836 to 6.09813 in the same period. This provided justification that credit unions provide services to members and clients of diverse income groups by tapping into savings deposits which is a relatively stable, low cost source of funds to finance growing loan portfolios. These funds are loaned to members to fund productive investments (Dixon, 2006). Therefore, these results provide a justification for further statistical analysis to be conducted hence the statements were retained for analysis.

b) Descriptive Results on savings deposits

The fourth objective was to evaluate the influence of voluntary savings on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

Table 4.15: Responses on voluntary savings

Opinion Statements	SA(%)	A(%)	D(%)	SD(%)	DK(%)	Mean	Std.Dev
Savings mobilization in DTS is accompanied by sound institutional controls and structures	23(54.8)	19(45.2)	0(0)	0(0)	0(0)	4.548	0.504
The demand for liquidity is more important to middle level members of DTS than demand for credit	19(45.2)	23(54.8)	0(0)	0(0)	0(0)	4.442	0.503
Financial system in DTS subsector recognize the importance of savings to the poor	21(50)	20(47.6)	0(0)	1(2.4)	0(0)	4.390	0.586
Financial costs relating to voluntary savings in DTS are easily identifiable	16(38.1)	23(61.9)	0(0.0)	0(0)	0(0)	4.381	0.491
Savings products are tailored to respond to demands of particular group members	16(38.1)	26(61.9)	0(0)	0(0)	0(0)	4.390	0.494
DTS are true financial intermediaries, accumulating savings for lending portfolios	11(26.2)	31(73.8)	0(0)	0(0)	0(0)	4.261	0.445
Average						4.402	0.4911

Table 4.15 findings indicate that 100% of the respondents agreed that Savings mobilization in Deposit taking Saccos is accompanied by Sound institutional controls and structures , 100% of the respondents agreed that The demand for liquidity is more important to most middle level members of DTS than the demand for credit, 97.6% of

the respondents agreed that Financial system in DTS subsector recognize the importance of savings to the poor, 100% of the respondents agreed that Financial costs relating to voluntary savings in DTS are easily identifiable, 100% of the respondents agreed that Savings products are tailored to respond to demands of particular groups of members, 100% of the respondents agreed that Deposit taking Saccos have become true financial intermediaries, accumulating savings deposits to build lending portfolios.

The mean score for responses for this section was 4.402 which indicated that majority of the respondents agreed that voluntary savings influences member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya. This gave 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 0.4911 on all the statements indicated that the respondents were moderately distributed.

4.5.5 Regulatory Environment

To determine the influence of regulatory environment on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya. This was the Moderating variable of the study on which Requirements for effective supervision test, and descriptive statistics were performed.

a) Requirements for effective supervision

The researcher performed tests on the Requirements for effective supervision as a Measure of prudential standards instituted by the regulator 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 supervisory regulations were adapted and applied uniformly in all the Deposit taking institutions.

Table 4.16: Requirements for effective supervision

Statements	Frequency	Percentage
Sound legal system	42	100.0
Formalized audit	42	100.0
Monitoring capacity	42	100.0
Regulatory framework	42	100.0
Authority to enforce law	42	100.0

Table 4.16 findings indicated that all the respondents from the Saccos subjected to test attested to the fact that Sound legal systems, Formalized audits, Monitoring capacity, Regulatory framework and Authority to enforce law are requirements for effective supervision with 100% acceptance. This provides justification that Deposit taking services need to operate within an established legal framework. Institutions that operate deposits taking business should be supervised by a regulatory authority responsible for supervision of the financial sector (Hellman et al., 2012).

Dandapani, Karels and Lawrence (2008) pointed that before engaging in deposit taking, institutions must establish prudential financial management disciplines as standards and practice. They must establish the core disciplines of delinquency control, loan loss provisions, liquidity reserves, control of non-earning assets, profitability, and capital reserving in order to protect member deposits. Therefore, these results provide justification for further statistical analysis to be conducted hence the statements were retained for analysis.

b) Descriptive Results on Regulatory Environment

Descriptive analysis was performed to establish the respondents perception concerning the Regulatory Environment

Table 4.17: Responses on Regulatory Environment

Opinion Statements	SA(%)	A(%)	D(%)	SD(%)	DK(%)	Mean	Std.dev
TS must install financial systems before licensing	16(38.1)	26(61.9)	0(0)	0(0)	0(0)	4.381	0.492
Governance enables transition from management to oversight board	12(28.6)	30(71.4)	0(0)	0(0)	0(0)	4.286	0.457
DTS comply to the structural changes in the financial statements.	12(28.6)	30(71.4)	0(0)	0(0)	0(0)	4.285	0.457
Institutional capital is reserved to cover operating risks	14(33.3)	28(66.7)	0(0)	0(0)	0(0)	4.333	0.477
Institutions mobilizing deposits are supervised by a regulatory authority	21(50.0)	21(50)	0(0)	0(0)	0(0)	4.500	0.506
Average						4.357	0.4778

Table 4.17 findings indicate that 100% of the respondents agreed DTS must install financial systems before licensing, 100% of the respondents agreed that Governance enables transition from management to oversight board, 100% of the respondents agreed that DTS comply to the structural changes in the financial statements, 100% of the respondents agreed that Institutional capital is reserved to cover operating risks, 100% of the respondents agreed that Institutions mobilizing deposits are supervised by a regulatory authority

The mean score responses of 4.357 indicated that majority of the respondents exhibited high responses on regulatory environment. This implies that regulatory environment is a key factor in moderating member advancement of licensed deposit taking Saccos in Nairobi City County 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 0.4778 on all the statements indicates that the respondents were moderately distributed.

4.5.6 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 City County, Kenya.

a) 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: Improve socio-economic conditions by investing in assets for the future

Opinion Statement	Frequency	Percentage
Improve socio/economic conditions	42	100

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 were in agreement with the views of Kempton et al. (2000) that deposit taking Saccos hold to the principle that internally generated savings provide an independent and sustainable supply of funds that are invested in the local community. They are fundamental to sustainable economic development and most frequent source of funding for microenterprise startup and expansion.

b) Descriptive Results on member advancement

Descriptive analysis was performed to establish the respondents' perception concerning member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

Table 4.19: Responses on member advancement

Opinion Statements	SA(%)	A(%)	D(%)	SD(%)	DK(%)	Mean	Std. Dev
To meet standards for capital adequacy, DTS must make surplus to build capital reserves	18(42.9)	24(57.1)	0(0)	0(0)	0(0)	4.429	0.501
Members of DTS contribute savings deposits to gain access to the financial products	11(26.2)	30(71.4)	0(0)	0(0)	1(2.4)	4.214	0.565
Members of Deposit taking	11(26.2)	31(73.8)	0(0)	0(0)	0(0)	4.262	0.445

Saccos expect to receive dividends on their savings deposits at the end of a financial period							
Deposit taking	20(50.6)	20(47.6)	0(0)	1(2.4)	0(0)	4.428	0.590
Saccos hold to the principle that internally generated savings create sustainable supply of funds							
DTS business contribute largely to the economic development of the country	20(47.6)	22(52.4)	0(0)	0(0)	0(0)	4.476	0.505
Voluntary savings in DTS enable members to smooth consumption in periods of irregular income flows	16(38.1)	25(59.5)	0(0)	1(2.4)	0(0)	4.357	0.532
Average						4.361	0.523

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 et al.,2005).

The mean score responses of 4.361 indicated that majority of the respondents exhibited high responses on member advancement. This implies that member advancement 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.

4.6 Interview Questions for Licensed deposit taking saccos

The interview guide questions were used for in-depth qualitative data collection. The instrument was administered concurrently with the questionnaire.

a) Descriptive Results on the interview questions for licensed deposit taking Saccos

Interview questions were administered to respondents of licensed deposit taking Saccos who gave varied responses on the questions.

Table 4.20: Summary table for interview questions

Questions	Responses	Frequency	Percentage
1. Diverse financial products	Loan	42	100.0
2. Loan classification	Performing	42	100.0
	Watch	42	100.0
	Substandard	42	100.0
	Doubtful	42	100.0
	Loss	42	100.0
3.Reason for failure to provide quick service	System breakdown	29	69.0
	strike by mother co.	4	9.5
	change of system	1	2.4
	mobile banking failure	1	2.4
	fraud	3	7.1
	requirements not met	1	2.4
	risk	1	2.4
	insufficient funds	2	4.8
	Total	42	100.0
4. Appealing Savings	Various categories of savings product	42	100.0
6. Prudential management	policies	42	100.0
6.Significant Source of financing	Deposit contributions	27	64.3
	loan from banks	8	19.0
	Borrowing from	5	11.9
	inter-Sacco borrowing	1	2.4
	Income from assets	1	2.4
Total		42	100.0

Table 4.20 findings indicate that 100% of the respondents agreed that the Sacco financially empower members with diverse loan products which change their financial behavior; Further 100% of the respondents agreed that they observe the five categories of Loan classification to measure performance which are: the Performing loans 1%, Watch loans 5%, Substandard loans 25%, Doubtful loans 50% and Loss loans 100%; 69% of the respondents indicated situation where service provider failed to deliver quick service to members as due to System breakdown, 9.5% due to strike by the mother Company, 2.4% due to change of system, 2.4% due to mobile banking failure, 7.1% due to fraud, 2.4% for not meeting the requirements, 2.4% due to other risks and 4.8% due to insufficient funds; 100% of the respondents indicated the appealing savings products developed for members of diverse groups; 100% of the respondents agreed to have established prudential disciplines to protect savings and the existence of the institution; Further 64% of the respondents indicated that the most Significant Source of financing to finance growing loan demand was from the deposit contributions, 19% from bank loans, 11.9% were borrowings from the umbrella body, 2.4% were inter Sacco borrowings and 2.4% were incomes from assets.

4.7 Inferential statistics

The section tested the assumptions of regression thus normality and multicollinearity after which statistical tests (Correlation analysis, regressions analysis and ANOVA) were performed to test the hypotheses as per the objectives.

4.7.1 Normality

Normality tests determined whether data sets are well modeled by a normal distribution (Farrel & stewart, 2006). Normality was tested and the results are given on the Table 4.21 based on Kolmogorov–Smirnov normality assumptions.

Table 4.21: Kolmogorov- Smirnov Test

Variable	mean	significance	Normality	Remarks
Member advancement	3.28	.000	Normal	Reject null hypothesis
Risk mgt	3.35	.000	Normal	Reject null hypothesis
Voluntary savings	3.11	.000	Normal	Reject null hypothesis
Financial services	3.13	.000	Normal	Reject null hypothesis
Credit portfolio administration	3.55	.002	Normal	Reject null hypothesis

Table 4.21 findings show the distribution of member advancement was normal with a mean of 3.28 and significance of 0.000, Financial services showed normal distribution with a mean of 3.13 and the p value of 0.000, Credit portfolio administration had normal distribution with a mean of 3.55 and p value of 0.000, normal distribution was observed on Risk management which had a mean of 3.35 and a p value of 0.000 and finally a normal distribution was observed on the Voluntary Savings which had a mean of 3.11 and p value of 0.000. This implied that the above determinants were normally distributed meaning, they satisfied the regression assumption of normality hence further statistics were undertaken (Kothari, 2004)

4.7.2 Multicollinearity results

Multicollinearity is excessive correlation among explanatory variables preventing identification of an optimal set of variables and this can be measured using Variance Inflation factor (VIF) not to be more than 10 while the equivalent for tolerance, not to be less than 0.1 (Creswell,2005). Multicollinearity refers to excessive correlations of the predictor variables. Correlation is excessive if using rule of thumb $r > 0.9$.

Table 4.22: Multicollinearity tests

Variable	Tolerance	VIF
Financial services	0.340	2.938
Credit portfolio administration	0.283	3.540
Risk management	0.364	2.746
Voluntary savings	0.282	3.543

The findings of table 4.22 shows that the VIF of Financial Services is 2.938 which is less than 10 and the tolerance level of Financial Services is 0.340 which is less than 0.1, Credit Portfolio Administration VIF shows $3.540 < 10$ and tolerance of $0.283 > 0.1$, the VIF for Risk Management is $2.746 < 10$ and tolerance of $0.364 > 0.1$. Finally the VIF for Voluntary Savings was $3.543 < 10$ and tolerance of $0.282 > 0.1$. These implied that there was no multicollinearity since the VIF values were all below 10 and the tolerance values were more than 0.1(Cooper & Schindler, 2003) Lack of multicollinearity has also been supported with the findings of table 4.22 where there was no excessive correlations represented by $r > 0.9$

4.8 Correlation Results

Table 4.23: Correlation Matrix

		Member advance ment	Financia l services	Credit portfolio admin	Risk Manage ment	voluntar y savings	Moder ating
MA	<i>r-Pearson correlation</i>	1.000					
	Sig.(2-tailed)						
FS	<i>r-Pearson correlation</i>	0.713	1.000				
	Sig.(2-tailed)	0.000					
CPA	<i>r-Pearson correlation</i>	0.789	0.771	1.000			
	Sig.(2-tailed)	0.000	0.000				
RM	<i>r- Pearson correlation</i>	0.827	0.708	0.728	1.000		
	Sig.(2-tailed)	0.000	0.000	0.000			
VS	<i>r- Pearson correlation</i>	0.780	0.745	0.797	0.758	1.000	
	Sig.(2-tailed)	0.000	0.000	0.000	0.000		
Mode	<i>r-Pearson correlation</i>	0.770	0.750	0.788	0.760	0.799	1.000
	Sig.(2-tailed)	0.000	0.000	0.000	0.000	0.000	

Notes: *, **. Correlation is significant at the 0.05 and 0.01 level.(2-tailed)

r refers to Pearson's correlation coefficient

MA(Member advancement) FS(Financial services) CPA(Credit portfolio administration) SD(Risk management) VS(voluntary savings) MODE(Moderating)

The results aimed at determining the degree of association between two or more variables (Jahangir & Begum, 2008). According to Triola (2008) 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 Russell (2013) 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. The study dependent variable was member advancement and the independent variables were Financial services ; Credit portfolio administration; Risk Management and voluntary savings.

Results of Table 4.23 indicated that there was a strong positive correlation of 0.713 between Financial services and member advancement of Deposit taking Saccos. The P value is 0.000 implying that the relationship was significant. This means that Financial services is a strong determinant of the member advancement of Deposit taking Saccos in Nairobi City County, Kenya.

The results of Table 4.23 indicate there was a strong positive correlation of 0.789 between Credit portfolio administration and member advancement of Deposit taking Saccos. The P value of 0.000 was obtained implying that the relationship was significant and that Credit portfolio administration was a strong determinant of the member advancement of Deposit taking Saccos

The Table 4.23 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. A strong positive relationship of 0.780 was further established in Table 4.23 between voluntary savings and member advancement of Deposit taking Saccos in Nairobi City County, Kenya. The p value of 0.000 was obtained indicating that the relationship is

significant. This meant that voluntary savings is an important determinant of member advancement of Deposit taking Saccos in Nairobi City County, Kenya. Table 4.23 findings indicate that RM variable had the strongest influence on member advancement, followed by Credit portfolio administration, voluntary savings and Financial services.

4.9 Regressions Results

The researcher used bivariate and multi regression analysis to determine the linear relationship between the dependent, independent and moderating variables. All the five null hypothesis stated in chapter one were tested using regression model to determine the relationship between the dependent variable which was Member advancement and the predictor variables which were Financial services, Credit portfolio administration, Risk Management, voluntary savings and moderating effect of Regulatory environment on the relationship between independent and dependent variables.

4.9.1 Test of Hypothesis One

The study hypothesis one was given as follows:

H₀₁: Financial Services have no significant effect on member advancement of deposit taking Saccos in Nairobi City County, Kenya.

H₀₂: Financial Services have significant effect on member advancement of deposit taking Saccos in Nairobi City County, Kenya.

To test this hypothesis a bivariate regression analysis was run. The independent variable was Financial Services and dependent variable was member advancement.

Table 4.24: Financial Services and member advancement model summary

R	R square	Adjusted R square	Std. Error of: the Estimate
0,713	0.509	0.504	0.75815a.

Predictor: (Constant), Financial Services

Table 4.24 indicate R to represent the correlation coefficient between the observed and predicted values of member advancement which was 0.713, R^2 was the coefficient of determination that shows the proportion of the dependent variable explained by the independent variable. R^2 of 50.9% obtained indicate the proportion of changes in member advancement that was explained by Financial Services.

Table 4.25: Financial Service sand member advancement regression coefficients

Coefficients					
Variable	B	Standard Error	Beta	t	Sig
(constant)	0.958	.243	3.942	.000	
Financial services	0.743	0.73	0,713	10.079	.000

a. Dependent Variable: MA

Further Table 4.25 shows the regression slope coefficients representing the influence of the Financial Services on member advancement. 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 show that the t value was 3.942 and $P = 0.000$ indicating that β was statistically significant since the p value of the t-static obtained is sufficiently low ($P < 0.005$). B represents the value for the regression equation for predicting the dependent

variable from the independent variable. The linear regression model of Financial Services and member advancement was $Y = \beta_0 + \beta_1 X_1 + \epsilon$ which becomes $MA = 0.958 + 0.743 X_1$. The null hypothesis was rejected and alternative hypothesis accepted that Financial Services significantly determine member advancement of deposit taking Saccos in Nairobi City County, Kenya (Worthington, 2012).

Table 4.26: Financial Services and member advancement ANOVA

Model	Sum of squares	df	Mean square	F	Sig
Regression	58.385	1	58.385	101.577	.000
Residual	56.325	98	0.575		

a. Dependent Variable: MA

b. Predictor: (Constant), FS

The overall significance of the regression model (goodness of fit) at 5% significance was tested using ANOVA (F-test). The findings of table 4.26 indicated that the value of computed F statistic was 101.577 with a P- value of 0.000 at the 5% level of significance. The null hypothesis was rejected since the probability value (P value) obtained for F was lower ($P < 0.005$). Thus, the model fit is acceptable implying that there is a significant positive linear relationship between Financial Services and member advancement of deposit taking Saccos in Nairobi County City, Kenya.

The model, sum of squares, df, mean square, F, Sig. means as follows: **Model** allows one to specify multiple models in a single regression command **Regression, Residue, Total** looks at breakdown of variance in the outcome variable. It indicates the total variance which can be explained by the independent variables (model) and the variance which is not explained by the independent variable (error). **Sum of squares** is associated with three sources of variance, total, model and residue.

Df is degrees of freedom associated with sources of variance

Mean squares are sum squares divided by df **F and Sig.** this is F-statistic and P- value associated with it. F is the mean square (regression) divided by the mean square (residual)

4.9.2 Test of Hypothesis Two

The study hypothesis was stated as follows:

Ho₁: Credit portfolio administration has no significant effect on member advancement of deposit Taking Saccos in Nairobi County City, Kenya.

Ho₂: Credit portfolio administration has significant effect on member advancement of deposit Taking Saccos in Nairobi County City, Kenya.

Table 4.27: Credit portfolio administration and member advancement model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.789	0.622	0.618	0.66499

a. Predictor: (Constant), Credit portfolio administration

Table 4.27 findings indicate that the coefficient of determination of R^2 was 0.622 implying that the model explains 62.2% of the variance in member advancement of deposit taking Saccos in Nairobi County City, Kenya; and the (R) correlation coefficient of 0.789 indicate the strength of association between the observed and predicted values of dependent variable.

Table 4.28: Credit portfolio administration and member advancement regression coefficients

Coefficients					
Variable	B	Std. Error	Beta	t	Sig
(Constant)	0.225	.250		0.901	.370
Credit Portfolio Admin	.861	.068	.789	12.705	.000

a. Dependent Variable: Member advancement

Further the researcher tested the regression analysis slope coefficient representing the influence of Credit portfolio administration on member advancement. 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 4.28 show that the t value was 12.705 and $P = 0.000$ indicating that β was statistically significant since the p value of the t static obtained is sufficiently low ($P < 0.005$). The null hypothesis was rejected and alternative hypothesis accepted that Credit portfolio administration significantly determine member advancement of deposit taking Saccos in Nairobi City County, Kenya. B indicates the values for the regression equation for predicting the dependent variable from the independent variable. The linear regression model of Credit portfolio administration and member advancement was $Y = \beta_0 + \beta_1 X_1 + \epsilon$ which becomes $MA = 0.225 + 0.861 X_1$. The beta factor indicates that Credit portfolio administration is a strong predictor of member advancement and this was supported by the t of 12.705 and $P = 0.000$ at a significance level of 5%.

Table 4.29: Credit portfolio administration and member advancement ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	71.378	1	71.378	161.411	.000
Residual	43.337	98	.422		

a. Dependent Variable: Member advancement

b. Predictor: (Constant), Credit portfolio administration

The researcher further performed ANOVA (F-test) to test overall significance of the regression model (goodness of fit) at 5% level of significance. Table 4.29 findings indicate that the value of computed F statistic was 161.411 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 lower ($P < 0.05$). Thus, the model fit is acceptable implying that there was a significant positive linear relationship between Credit portfolio administration and member advancement of deposit taking Saccos in Nairobi County, Kenya

4.9.3 Test of Hypothesis Three

The study hypothesis was stated as follows:

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

H₀₂: Risk management has significant effect on member advancement of deposit Taking Saccos in Nairobi City County, Kenya.

Table 4.30: Risk management and member advancement model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.827	0684	0.681	0.60841

Predictor: Constant), RM

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 City County, Kenya; as shown in table 4.30. The correlation coefficient (R) of 0.827 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 in Nairobi City County, Kenya.

Table 4.31: risk management and member advancement regression coefficients

variable	Coefficients				
	B	Std. Error	Beta	t	Sig
(Constant)	0.586	0.195		3.005	.003
Risk management	0.806	0.055	0.827	14.557	.000

a. **Dependent Variable: MA**

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 $Y = \beta_0 + \beta_1 X_1 + \epsilon$ 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 4.32: Risk management and member advancement ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	44.397	1	44.397	171.443	.000
Residual	25.378	98	.359		
Total	69.776	99			

a. Dependent Variable: MA
b. Predictor: (Constant), RM

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 4.32 indicated that the value of computed F statistic was 171.443 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 City county, Kenya.

4.9.4 Test of Hypothesis Four

The study hypothesis was stated as follows:

Ho₁: Voluntary Savings have no significant effect on Member advancement of deposit Taking Saccos in Nairobi City County, Kenya.

Ho₂: Voluntary Savings have significant effect on Member advancement of deposit Taking Saccos in Nairobi City County, Kenya.

Table 4.33: Voluntary Savings and member advancement model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.780	0.608	0.604	0.52847

Predictor: (Constant), Voluntary Savings

The Regression analysis was run to test the above hypothesis and Table 4.33 established that the coefficient of determination R^2 was 0.608 which indicate that 60.8% of changes in Member advancement were caused by Voluntary Savings. The correlation coefficient (R) of 0.780 indicates the strength of association between the observed (Voluntary Savings) and predicted variable (Member advancement). The findings imply that Voluntary Savings was an important predictor of member advancement of deposit taking Saccos in Nairobi City County Kenya.

Table 4.34: Voluntary Savings and member advancement regression coefficients

Coefficients					
Variable	B	Std. Error	Beta	t	Sig.
(Constant)	0.635	.223	.	2.851	.005
Voluntary savings	0.851	0.068	0.780	12.487	.000

a. Dependent Variable: MA

Further the researcher run the regression analysis slope coefficient representing the influence of Voluntary Savings on member advancement. The t- statistic was used to test the hypothesis on the significance of slope coefficient (β) at 5 per cent level of significance. Findings of Table 4.34 show that linear regression model of Voluntary

Savings on Member advancement was $Y = \beta_0 + \beta_1 X_1 + \varepsilon$ which becomes $MA = 0.635 + 0.851 X_1$. The beta coefficient of 0.780 indicate that Voluntary Savings had strong effect on Member advancement which has been supported by $t = 12.487$ and $P = 0.000$ at 5% level of significance. The null hypothesis was rejected and alternative hypothesis accepted that Voluntary Savings significantly determine Member advancement of deposit taking Saccos in Nairobi City County, Kenya.

Table 4.35: Voluntary Savings and member advancement ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	70.443	1	70.443	151.839	.000
Residual	44.271	98	0.2		
Total	114.75	99			

a. Dependent Variable: Member advancement

b. Predictor: (Constant): Voluntary savings

The researcher further performed ANOVA (F-test) to test overall significance of the regression model (goodness of fit) at 5% level of significance. The findings of table 4.35 indicated that the value of computed F statistic was 151.839 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 lower ($P < 0.005$). Thus, the model fit is acceptable implying that there was a significant positive linear relationship between Voluntary Savings and Member advancement of deposit taking Saccos in Nairobi City County Kenya.

4.9.5 Multiple regression results

Multiple regression analysis was used to establish the joint effect of independent variables; Financial services (β_1, X_1), Credit portfolio administration (β_2, X_2), Risk management (β_3, X_3) Voluntary Savings (β_4, X_4) on dependent variable (Member advancement, Y). The linear regression model used was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Table 4.36: Member advancement model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.878	0.770	0.771	0.52654

Predictor: (Constant): Financial services, Credit portfolio administration, Risk management and Voluntary savings

Table 4.36 results showed that coefficient of determination (R^2) is 0.770 which means that the independent variables explained 77% of the changes in the Member advancement of deposit taking Saccos in Nairobi City County Kenya. The correlation coefficient of (R) 0.878 showed the strength of association between the independent and dependent variables. The findings imply that Financial services, Credit portfolio administration, Risk management, and Voluntary Savings are strong determinants of Member advancement of deposit taking Saccos in Nairobi City County, Kenya.

Table 4.37: Member advancement regression coefficients

Variable	B	Std. Error	Beta	t	Sig
(Constant)	-0.40	0.201		-0.200	0.842
Financial services	0.034	0.088	0.033	0.386	0.700
Credit portfolio administration	0.1306	0.101	0.280	3.032	0.003
Risk management	0.444	0.079	0.455	5.585	0.000
Voluntary savings	0.208	0.101	0.191	2.065	0.042

a. Dependent Variable: MA

Table 4.37 shows the regression analysis slope coefficient representing the influence of the independent variables: Financial services, Credit portfolio administration, Risk management, and Voluntary Savings on dependent variable: Member advancement. The t-statistic was used to test the hypothesis on the significance of slope coefficient at 5% level of significance. The findings showed financial services had a statistically insignificant positive relationship with Member advancement of deposit taking Saccos in Nairobi City County, Kenya. ($t=0.386$ and $P=0.700 > 0.05$), Credit portfolio administration had a positive and significant relationship with Member advancement ($t = 3.032$, $P=0.003 < 0.05$), Risk management had a positive and significant relationship with Member advancement of deposit taking Saccos in Nairobi City County, Kenya; ($t = 5.585$, $P=0.000 < 0.05$), and Voluntary Savings had a positive and significant relationship with Member advancement of deposit taking Saccos in Nairobi City County, Kenya. ($t = 2.065$, $P=0.042 < 0.05$). The findings of this study implied that the major determinants of Member advancement of deposit taking Saccos in Nairobi City County, Kenya are: Credit portfolio administration, Risk management and Voluntary Savings. The linear regression equation was: $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$. B coefficient indicate the values for the regression equation for predicting the

dependent variable (Member advancement) from the independent variables (Financial services, Credit portfolio administration, Risk management , and Voluntary Savings). The equation $Y = -0.40 + 0.034 X_1 + 0.306X_2 + 0.444 X_3 + 0.208 X_4$.

The Beta coefficient compares the magnitude of the coefficients to see which one has more effect. Table 4.37 findings indicate that Risk management has more effect followed by Credit portfolio administration, Voluntary Savings and finally Financial services.

Table 4.38: Modified Member advancement regression coefficients

Unstandardized Coefficients		Standardized Coefficients			
Variable	B	Std. Error	Beta	t	Sig
(Constant)	-0.62	0.202		-.307	.759
Credit portfolio Administration	.324	.094	.294	3.446	.001
Risk management	0.445	.078	.462	5.847	.000
Voluntary savings	.219	.098	.200	2.226	.028

a. Dependent Variable: MA

The researcher dropped the insignificant variable (Financial services $p=0.700>0.05$) and made a modified regression model consisting of Credit portfolio administration, Risk management and Voluntary Savings. Table 4.38 findings indicate that Credit portfolio administration had a statistically significant positive relationship on Member advancement of deposit taking Saccos in Nairobi City County Kenya. ($t=3.446$ and $P=0.001<0.05$), Risk management had a significant

positive relationship on Member advancement of $t=5.847$ and $p=0.000<0.05$) and Voluntary Savings had a significant positive relationship with Member advancement of

t= 2.226 and p= 0.28<0.05. The findings further indicated the regression equation as $Y = \beta_0 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$. when substituted it became $MA = -0.062 + 0.324X_2 + 0.455X_3 + 0.219X_4$. The equation showed improvement in the prediction of Member advancement from the independent variable (Credit portfolio administration, risk management and Voluntary Savings). The comparison of magnitude of the coefficients showed that Risk management had more effect compared to Credit portfolio administration and Voluntary Savings.

Table 4.39: Member advancement model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.878	0.770	0.763	0.52952

Table 4.39 findings indicate that the regression model summary for the three variables remained similar, correlation coefficient $r = 0.878$ and coefficient of determination R^2 was $=0.770$. Therefore the three independent variables: Credit portfolio administration, Risk management and Voluntary Savings explained 77.0% of the variances in Member advancement and therefore had a strong effect on Member advancement of deposit taking Saccos in Nairobi City County, Kenya.

Table 4.40: Member advancement ANOVAa

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	90.218	3	30.073	107.251	.000
Residual	26.918	96	0.280		
Total	117.136	99			

a. Dependent Variable: Member advancement

b. Predictor: (Constant): Voluntary savings, Risk management and Credit portfolio administration

ANOVA (F-test) was used to test the overall significance of the regression model (goodness of fit) at 5% level of significance. Table 4.40 results indicate the computed F statistic as 107.251 with a P value of 0.000 at the 5% level of significance. Reject null hypothesis and accept alternate hypothesis since there was significant influence of independent variables on Member advancement of deposit taking Saccos in Nairobi City County, Kenya.

4.9.6 Test of Hypothesis Five

The study hypothesis five was stated as follows:

Ho₁ Regulatory environment by the regulatory authority has no significant effect on member advancement

Ho₂ Regulatory environment by the regulatory authority significantly influence member advancement.

The study employed stepwise moderated multiple regression (MMR) analysis to determine the moderating effect of member advancement on the relationship between the independent and dependent variable (Linyiru, Karanja & Gichira, 2015). To find the moderator, transformation of the items under the moderating variable was done to obtain one variable called Z (regularoty environment).

The Z was multiplied by each of the independent variables and added on the original variables one by one at a time after which regression analysis was performed to show the interactive effect of each new independent variable introduced. According to Sekaran & Bougie (2010) a moderator is one that has a strong contingent effect on the relationship between independent and dependent variable.

Regulatory environment

Table 4.41: Member advancement moderated regression model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.882	0.778	0.769	0.52315

Predictors: (Constant),Z moderated Credit portfolio administration, Credit portfolio administration, Risk management, Voluntary Savings

It was observed that when regulatory environment was introduced as the moderator on the relationship between determinants and Member advancement, the regression model had coefficient of determination (R^2) 0.778 which indicates that determinants (Credit portfolio administration, Risk management and Voluntary Savings) explain 77.8% showing improvement of 0.8% (77.8%-77.0%). Correlation coefficient of 0.882 indicates the association of strength between the independent variables and Member advancement.

Table 4.42: Member advancement moderated regression analysis coefficient

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	-.313	.242		-1.293	.199
Credit portfolio Administration	.458	.118	.415	3.873	.000
Risk management	.470	.077	.477	6.075	.000
Voluntary savings	.265	.100	.241	2.637	.010
Z* Credit portfolio Administration	-.036	.020	-.190	-1.831	.04

a. Dependent Variable: MA

The t-statistic was used to test the hypothesis on the significance of the slope coefficient at 5% level of significance. Table 4.42 showed a significant relationship between Credit portfolio administration $t = 3.873$, $P = 0.000 < 0.05$, Risk management $t = 6.075$ and $P = 0.000 < 0.05$, Voluntary Savings $t = 2.637$ and $P = 0.010 < 0.05$ and Regulatory environment on the Credit portfolio administration $t = -1.831$ and $P = 0.040 < 0.05$. The t statistic coefficients showed that the regulatory environment had a moderating influence on the determinants of Member advancement of deposit taking Saccos in Nairobi City County, Kenya. The estimated Moderated Multiple Regression (MMR) model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_{2Z} X_{2Z} + \varepsilon.Y$$

$$= -0.313 + 0.458(X2) + 0.470(X3) + 0.265(X4) - 0.036(X2Z)$$

Table 4.43: Member advancement moderated ANOVAa

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	91.135	4	22.784	83.248	.000
Residual	26.918	96	0.280		
Total	26.000	95	.274		

a. Dependent Variable: Member advancement

b. Predictors: (Constant), ZCPA, RM, VS, CPA

The researcher further run ANOVA (F- Test) to establish the overall significance of the Moderated Multiple Regression (MMR) model (the goodness of fit) at 5% level of significance. Table 4.43 results indicate that the value of computed F statistic was 83.248 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 computed F is sufficiently low ($P=0.000 < 0.05$). The Moderated Multiple Regression model fit was acceptable implying that regulatory environment significantly moderates the relationship between the independent variables (Credit portfolio administration, Risk management and Voluntary Savings.) and dependent variable Member advancement of deposit taking Saccos in Nairobi City County, Kenya.

4.10 Discussion of key findings

Financial services had a mean 3.1300 which indicated that deposit taking Saccos frequently offer diversified financial products, coefficient of correlation of R 0.713 which meant a strong positive and significant relationship between Financial services and Member advancement. Further the coefficient of determination was established to be 50.9% meaning that Financial services causes 50.9% of changes in Member advancement implying that Financial services has a significant effect on Member advancement.

These findings were consistent with the findings of Burger and Zellmer (2008) who lauded that Deposit taking Saccos are not for profit organizations but exist to provide financial services to their members rather than to maximize corporate profits. Like banks, Deposit taking Saccos accept deposits and make loans; but as member owned institutions, they focus on providing a safe place to save and borrow at reasonable rates. Service Fees and loan rates are generally lower, while interest rates returned are generally higher, than other for profit institutions (Broun, 2014).

Burger and Zellmer (2008) highlighted the need for Deposit taking Saccos to develop products that change financial behaviour. Such financial services are viewed as a transition into the mainstream financial system. They are ideally positioned to enhance the financial capability of their members. Unlike most bank loans, where interest is charged on the principal amount borrowed, interest on Deposit taking Saccos loan is paid on the reducing balance of the loan, and at a rate of no more than 1 per cent per month (Byrne et al.,2005)

The study established the mean of 3.5529 which indicated that majority of the respondents were in agreement that Credit portfolio administration is a key driver of Member advancement. Correlation of R 0.789 meant that there was a positive significant correlation between Credit portfolio administration and Member advancement . Coefficient of determination (R^2) of 62.2% implies that Credit portfolio administration explains 62.2% of the changes in Member advancement .

These study findings were consistent with the findings of McGuire et al. (2007) who described Credit portfolio administration to have an effect not only on deposit taking Saccos Member advancement but also on economic growth of the country. A Portfolio Access Line of Credit allows a member to take a loan using any form of acceptable security as collateral, at the lowest cost offering a better solution for member liquidity needs. It allows a member to satisfy his financial needs without selling assets and potentially disrupting his long-term investment plan; and enjoy greater liquidity, for

current and future needs. Higher loan amounts and customized advance rates are also available, all depending on one's eligibility to pay (Brown & Davis, 2009).

Cohem (2001) identified loan portfolio as the primary income generating asset for the Saccos contributing about 95% of the Sacco gross income. The main objective of a loan portfolio outlines requirements for regular assessment of the risks and inadequacies inherent in the Sacco portfolio. The entire loan portfolio is assessed to determine its quality. The exercise involves classification of the Sacco loan portfolio to measure its performance against the terms provided in the original loan contract and the level of compliance (The Sacco societies regulation, 2010).

Deposit taking Saccos undertake reviews of the credit portfolio regularly to make a risk classification of Assets and provisioning. Loans are classified into five categories and provisions awarded in line with the magnitude of risk involved as follows; Performing loans 1%, Watch loans 5%, Substandard loans 25%, doubtful loans 50% and loss loans 100% (The Sacco societies regulation, 2010).

Further, the study established 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).

The study further established a mean of 3.117 which meant that respondents used Voluntary savings frequently, a strong positive correlation of 0.780 was found between Voluntary savings and Member advancement indicating that Voluntary savings affects Member advancement. The coefficient of determination of 60.8% was established which indicated the proportion of change in Member advancement caused by Voluntary savings. This implied that Voluntary savings was major factor influencing Member advancement.

The findings were supported by Byrne et al.(2005) who indicated that Voluntary savings calls for creation of safe and sound institutions where savers place their deposits with the expectation that they will receive the full value of their funds, plus a real return, upon withdrawal. It involves developing appropriate products to satisfy the local demand and marketing those products to savers of varying income levels. Savings contribution is capturing voluntary savings deposits, protecting them, managing them, and using them to fund loan portfolios. Credit unions around the world provide savings services to their members and clients of diverse income groups on a sustainable basis. The tapped savings deposits are a relatively stable, low cost source of funds to finance growing loan portfolios. (BrunnerMeier, 2011).

The four independent variables together through a multiple regression model explained 77.0% of the variances in Member advancement. Besides after moderating the relationship between the independent variables: Credit portfolio administration, Risk management Voluntary Savings and dependent variable (Member advancement) with the Regulatory environment, the multiple regression model explained 77.8% of the variances in Member advancement which showed improvement of 0.8% (77.8% and 77.0%). It was further noted that Risk management was the strongest variable followed by Credit portfolio administration, Voluntary Savings and Financial services.

These findings are supported by findings on Table 4.3, 4.4 and 4.5, where there was a relationship between the position of the respondents in the Sacco, number of years

served, and the level of education. It was indicated that majorly of the deposit taking respondents were the chief executive officers. This was supported by (The Sacco societies regulatory Authority, 2012) that chief executive officers experience in service has a moderating effect on the relationship between determinants and Member advancement of deposit taking Saccos in Nairobi City County, Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter presents the summary of the key findings of the study presented in chapter four, conclusions drawn based on the findings and recommendations. This chapter is therefore, structured into summary, conclusions, recommendations and areas for further research based on the study objectives, and hypotheses.

5.2 Summary

This section summarizes the key findings of the study on the basis of the study objectives. The overall objective was to determine the effect of Sacco financial empowerment on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya. Specifically, the study examined the effect of accessing financial services on member advancement, evaluated the effect of credit portfolio administration on member advancement, assessed the effect of risk management on member advancement, examined the effect of voluntary savings on member advancement, and explored the moderating effect of SACCO regulatory environment on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

The main findings drawn from five specific objectives and based on the output of the descriptive and inferential statistical analyses were as follows:

5.2.1 Effect of financial services on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

The findings revealed that proper structures of financial services minimize the exclusion of the majority of the population from the formal banking sector. Like banks, deposit taking Saccos accept deposits and make loans; but as member owned institutions, they

focus on providing a safe place to save and borrow at reasonable rates. Licensed deposits taking Saccos continue to look out for their members interests particularly those under served by banks and provide a level of service that is not generally available in other financial institutions for member advancement. This approach therefore enables the Sacco subsector to achieve its objective of increasing accessibility of financial services for members with limited financial capabilities.

5.2.2 Effect of credit portfolio administration on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

The findings revealed that a loan portfolio administration outlines requirements for regular assessment of the risks, inadequacies inherent in the Sacco portfolio to determine its quality, and performance against the terms provided in the original loan contract and the level of compliance. Deposit taking Saccos undertake reviews of the credit portfolio at least once every quarter of the year to make a risk classification of Assets and provisioning. Loans are classified into five categories and provisions awarded in line with the magnitude of risk involved. Deposit taking Saccos establish credit programs for their members which provide numerous credit products with a tremendous appeal to members, and exciting features which meet their needs while providing cost-effective alternatives.

5.2.3 Effect of Risk management on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

The findings revealed that Risk Management is the process of protecting the Deposit taking Saccos Assets, Liabilities and Resources from loss and damage. It is also a conscious attempt by Management to identify measures and control all exposures to loss which are created by the activities in which the society engage. Deposits taking Saccos are confronted with risks on daily basis, regardless of the nature of the common bond, size or location. The element of risk is found in all phases of the business operations.

Risk is a part of business and human relationship, just as a Sacco must manage its funds efficiently, risk must be managed wisely. Risk will never be eliminated; the goal is to lessen the dangers by managing the risk.

5.2.4 Effect of voluntary savings on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

The findings revealed that voluntary savings being savings a member contributes to the Sacco by way of investing for future use are characterized by convenience, the ability to deposit and withdraw at will and earn market driven rates of return on funds deposited. It involves developing appropriate products to satisfy the local demand for voluntary savings services and marketing those products to savers of varying income levels. Interest is the return paid to savers on their savings investment at the close of a financial period, which they consider when choosing savings products. These experienced savers are willing to sacrifice liquidity to maximize returns. They are loyal only as long as the return paid by the savings institution is the highest in the local market.

5.2.5 Explored the moderating effect of SACCO regulatory environment on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

The findings revealed that with the introduction of Regulatory environment, the operations model for Deposit taking Saccos improved, as members gained confidence of the regulatory framework protecting their deposits. Governance, accountability and transparency are greatly emphasized in the application of the prudential standards. The legal framework identifies what recourse depositors have to recover their deposits from institutions in times of crisis. Institutions that mobilize voluntary deposits are supervised by a regulatory authority responsible for supervision of the financial sector.

5.3 Conclusions

Licensed deposit taking Sacco's should implement the determinants under study in the order of their contribution to member advancement: Risk management, Credit portfolio administration, Voluntary savings and financial services. Regulatory environment influences the relationship between financial empowerment and member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

5.3.1 The contribution of Risk management on member advancement of licensed deposit taking Saccos in Nairobi County, Kenya.

Risk management had a positive and significant relationship with Member advancement of deposit taking Saccos in Nairobi city county Kenya. ($t = 5.585$, $P = 0.000 < 0.05$). 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 the society to adapt to new situations and introduce new risks in its risk management policy.

5.3.2 The contribution of Credit portfolio administration on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

Credit portfolio administration had a positive and significant relationship with Member advancement ($t = 3.032$, $P = 0.003 < 0.05$); thus justifying the loan portfolio as the primary income generating asset for the Sacco which contributes about 95% of the Sacco gross income. Deposit taking Saccos establishes credit programs with the ability to provide numerous credit products which have a tremendous appeal to members.

5.3.3 The contribution of Voluntary savings on member advancement of licensed deposit taking Saccos in Nairobi County, Kenya.

Voluntary Savings had a positive and significant relationship with Member advancement of deposit taking Saccos in Nairobi City County, Kenya. ($t = 2.065$, $P = 0.042 < 0.05$). Voluntary savings calls for creation of safe and sound institutions where savers place their deposits with the expectation that they receive the full value of their funds, plus a real return, upon withdrawal. It involves developing appropriate products to satisfy the local demand for voluntary savings services and marketing those products to savers of varying income levels. Savings contributions are used to fund loan portfolios.

5.3.4 The contribution of Financial services on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

Financial services had a statistically insignificant positive relationship with Member advancement of deposit taking Saccos in Nairobi City County, Kenya. ($t = 0.386$ and $P = 0.700 > 0.05$). Access to financial services is a significant challenge in Kenya, where majority of the population is excluded from the formal banking sector. Deposit taking Saccos continue to look out for their members interests particularly those under served by banks and provide a level of service that is not generally available in other financial institutions. The operating income is returned to depositors in the form of interest on savings and lower interest rates on loans.

5.4. Recommendations

This section made recommendations based on the key findings of the study on the effect of financial empowerment on member advancement of the deposit taking Saccos in Nairobi City county, Kenya. The researcher suggested recommendations based on the information from the theoretical reviews and the research findings on each of the specific objectives; financial services, credit portfolio, risk management, voluntary savings and Regulatory environment.

5.4.1 Effect of financial services on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya

The findings revealed that proper structures of financial services would reduce the exclusion of the majority of the population from the formal banking sector, therefore Licensed deposit taking Saccos should develop diversified financial products that are most appealing to different categories of membership and therefore retain their loyalty. This will change members borrowing behavior that improves the liquid funds required for on lending to the growing credit demand.

5.4.2 Effect of credit portfolio administration on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

On credit portfolio the findings revealed that a loan portfolio administration outlines requirements for regular assessment of the risks, inadequacies inherent in the Sacco portfolio to determine its quality, and performance against the terms provided in the original loan contract and the level of compliance. The researcher recommends that Deposit taking Saccos undertake regular reviews of the credit portfolio at least once every month to improve risk classification of Assets and provisioning.

5.4.3 The effect of Risk management on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

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 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 problem 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.

5.4.4 Effect of voluntary savings on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

On voluntary savings on member advancement of licensed deposit taking Saccos , The findings revealed that voluntary savings are savings a member contributes to the Sacco by way of investing for future use. They are characterized by convenience, the ability to deposit and withdraw at will and earn market driven rates of return on funds deposited. The researcher recommends that Deposit Taking Saccos should design additional market outreach to potential savers for savings mobilization.

5.4.5 Moderating effect of SACCO regulatory environment on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya.

On financial regulation, the findings revealed that with the introduction of Regulatory environment, the effect increased compared to the direct effect between determinants and Member Advancement. The researcher therefore recommends that Deposit taking Saccos need to operate within an established legal framework that identifies which institutions, under which criteria are able to receive deposits from members

5.4.6 Managerial Recommendations

Licensed deposit taking Saccos should enhance proper governance to build reputation that distinguish their services from those of the competitors. This will attract net savers and borrowers to patronize the numerous appealing products of the Sacco which contribute to the growth and stability of the business. Licensed deposit taking Saccos should increase savings deposits mobilization to attract stable funds, of low cost ,that finance the growing loan demands.

5.4.7 Policy Recommendations

Licensed deposit taking Saccos in Nairobi County Kenya should establish the policies on the following matters: Credit portfolio administration, risk management and voluntary savings. The policies will give specific direction on handling the variables. They should particularly adhere to the credit portfolio policy to cushion loan delinquencies which affect the stability of funds to the borrowers, and thus not meeting the primary objective of being an income generating asset for the Sacco.

Credit portfolio administration policies guide on the kind of risk the Saccos may tolerate in their portfolios and how to detect and respond to problems in advance. These policies also indicate the tools the Saccos use to manage credit risk and describe how the tools aid in the administration of the policy. Credit portfolio administration policies support other loan policies including the liquidity policies and procedures. They provide guidance to management and reflect the Sacco risk management philosophy. Credit portfolio administration is quite complex thus requiring detailed Loan policies.

5.5 Areas for further research

The study on effect of Sacco financial empowerment on member advancement of licensed deposit taking Saccos in Nairobi City County, Kenya explained 77.8% of the change in the member advancement of licensed deposit taking Saccos in Nairobi City, County Kenya. The researcher recommends further study to establish other financial empowerment factors that affect the relationship between determinants and member advancement of licensed deposit taking Saccos that could explain the 22.2%. The researcher further recommends a research to be conducted using similar variables: financial services, credit portfolio administration, risk management, voluntary savings, regulatory environment to establish whether same results are attained. Future researchers could also consider introducing different variables other than financial empowerment,

preferably the environmental factors, the Sacco size and sacco culture; and testing for moderating effect.

REFERENCES

- ACCOSCA (2012). *Challenges facing Sacco Regulation in Africa*. Retrieved from www.accosea.org/index.php?p
- Alhadab, M., Clacher, I., & Keasey, K. (2016). A Comparative Analysis of Real and Accrual Earnings Management around Initial Public Offerings under Different Regulatory Environments. *Journal Of Business Finance & Accounting*, 43(7/8), 849-871
- Allred, A.T. & Addams, L. (2009). Service quality at banks and credit unions: what do their customers say? *Managing Service Quality: An International Journal*, 10(1), 52-60.
- Alukwe, G.H., Ngugi, P.K., & Orwa, G.O. (2015). Corporate Governance Challenge to Regulation Compliance by Deposit Taking Savings and Credit Cooperative Societies in Kenya. *International Journal of Academic Research in Business and Social Sciences*, 5(3), 179-193
- Amarach Research (2009). *Investing in Our Future: Ireland's Credit Unions in the 21st Century*. Report commissioned by the Irish League of Credit Unions
Amarach Research: Dublin.
- Ang, J. B. (2011). Savings Mobilization, Financial Development and Liberalization: The Case of Malaysia. *Review of Income & Wealth*, 57(3), 449-470.
- Atkinson, A. (2008). *Evidence of Impact: an Overview of Financial Education Evaluations*. *Consumer Research* 68. Financial Services Authority.
- Bailey, T. (2001). Applying International Best Practices to South Africa's SACCOs: Published Dissertation. *South Africa: De Mont Fort University*.

- Benson, O., Bartholomew, T., & Kazungu, I. (2013). Relationship between sources of funds and outreach in savings and credits cooperatives societies: Tanzanian case. *European Journal of Business and Management*, 5, 188–196.
- Berger, A.N. & Humphrey, D. (2003). Efficiency of financial institutions: international survey and directions for future research, *European Journal of Operational Research*, 98, 175-212.
- Birchall, J. (2015). *Cooperatives and the Millennium Development Goals*. Nairobi: ACTs Press.
- Blake, S., & De Jong, E. (2008). *Short Changed: Financial Exclusion-a Guide for Donors and Funders*. New Philanthropy Capital.
- Bonus, H. (1986). The Cooperative Association as a Business Enterprise: A study in Economics of transactions, *Journal of institutional and Theoretical Economics*, 142, 310-339.
- Boomgard, J. J & Angell, K. J. (2002). *Developing Financial Services for Micro enterprises*. Gemini, Washington: Prentice Hill.
- Bosse, D. A., & Phillips, R. A. (2016). Agency Theory and Bounded Self-Interest. *Academy Of Management Review*, 41(2), 276-297
- Branch, B. (2013). *Overcoming Credit Union Governance Problems in Safe Money*, Washington, DC: Inter-American Development Bank.
- Branch, B., Nathalie, G., & Cifuentes, C. (2010). *The Road to Jinotega*. Madison: World Council of Credit Unions Inc.
- Branch, K. & Cifuentes, U. (2001). Capital management in mutual financial institutions, *Journal of Banking & Finance*, 33, 443-455.

- Braverman, A. & Guasch, L. (2014). *Institutional Analysis of Credit Co-operatives*. Oxford: Clarendon Press.
- Brian, B, Gons, N., & Cifuentes, M. (2010). *The Road to Jinotega* Madison:World Council of Credit Unions Inc.
- Broun, D. (2014). Building Capability, Empowering Students, and Achieving Success: The Financial Empowerment for Student Success Initiative. *Academy Of Management Review*, 41(2), 76-97
- Brown, C. & Davis, K. (2012). Capital management in mutual financial institutions, *Journal of Banking & Finance*, 33, 443-455.
- Brown, M., Conaty, P. & Paterson, B. (2005). Community Banking Partnership: a joined-up solution for financial inclusion. *Paper presented at the BIC Credit Union Practitioners' Conference*, 8 February, Cardiff.
- Brown, R. & O'Connor, K. (1999). Efficiency, bond of association and exit patterns in credit unions: Australian evidence. *Annals of Public and Cooperative Economics*, 70, 5-23.
- Brunnermeier, M.K. (2009). Deciphering the liquidity and credit crunch 2007-08, *Journal of Economic Perspectives*, 23, 77-100.
- Bryman, B. & Bell, E. (2011). *Business Research Methods*, (3rd ed.). London: Oxford: Oxford University Press.
- Burger, A.E. & Zellmer, M. (2016). *Strategic Opportunities in Serving Low to Moderate Income Members*. Wisconsin : Filene Research Institute,.
- Byrne, N. (2009, April). Financial Education and Co-operatives. In *Report of the Mutual Learning on Financial Exclusion Workshop* (Vol. 24).

- Byrne, N., McCarthy, O., & Ward, M. (2005). *Meeting the Credit Needs of Low-Income Groups: credit unions-v-moneylenders* (Vol. 5). Combat Poverty Agency.
- Byrne, N., McCarthy, O., & Ward, M. (2007). Money-lending and financial exclusion. *Public Money and Management*, 27(1), 45-52.
- Can, M., & Gozgor, G. (2018). Effects of export product diversification on quality upgrading: an empirical study. *Journal of International Trade & Economic Development*, 27((3), 293-313.
- Carrilus, A. (2011). Challenges facing Sacco Regulation in Africa. In *11 th SACCA Congress: Swaziland* (Vol. 12, No. 1, pp. 42-48).
- Cheruiyot, T. K., Kimeli, C. M., & Ogendo, S. M. (2012). Effect of Savings and Credit Co-operative Societies Strategies on Member's Savings Mobilization in Nairobi, Kenya. *International Journal of Business and Commerce*, 1(11), 40-63.
- Chua, S., Lim, Y., Ter, T., & Chew, S. (2014). Efficiency Wage Theory: Evidence For Singapore Manufacturing Sector. *Singapore Economic Review*, 59(3), -1.
- Churk, J. P. (2015). Contributions of Savings and Credit Cooperative Society on Improving Rural Livelihood in Makungu ward Iringa, Tanzania. *Journal Of Emerging Issues In Economics, Finance & Banking*, 4(2), 1602-1614
- Clement, O., Mbewa, O., & Jagongo, A. (2012). Financial practice as a determinant of growth of savings and credit co-operative societies' wealth. *International Journal of Business and Social Science*, 3, 204–219
- Cohen, M. J. (2005). Consumer credit, household financial management, and sustainable consumption. *International Journal of Consumer Studies*; 31, 57-65.

- Cohen, M. J. (2007). Sustainable Consumption American Style: Nutrition Education, Active Living, and Financial Literacy. *In Proceedings of Sustainable Consumption: The Contribution of Research*, 10-12 February, Oslo.
- Connolly, C. & Hajaj, K. (2001). *Financial Services and Social Exclusion*. Financial Services Consumer Policy Centre: University of New South Wales.
- Cooperative Bank of Kenya (2008). *Cooperative Bank of Kenya Report on the SACCO movement in Kenya*. AFRACA workshop: Nairobi, Kenya. Available on www.afraca.org/main.
- Corr, C. (2006). *Financial Exclusion in Ireland: An Exploratory Study and Policy Review*. Dublin: Combat Poverty Agency.
- Cox, D. (1983). *Success in elements of banking*. John Murray.
- Cuevas, C. & Fischer, K.P. (2006). *Cooperative Financial Institutions: Issues in Governance, Regulation, and Supervision*. Washington DC: World Bank.
- Cuevas, C. (2000). *E Banking With the Poor*. Washington DC: The World Bank.
- Damar, H. E. & Hunnicutt, L. (2010). Credit union membership and use of internet banking technology. *B.E. Journal of Economic Analysis & Policy*, 2(12), 43-59.
- Dandapani, K., Karels, G.V. & Lawrence, E.R. (2008). Internet banking services and credit union performance. *Managerial Finance*, 34, 437-446.
- De Jong, A., Verbeek, M., & Verwijmeren, P. (2010). The Impact of Financing Surpluses and Large Financing Deficits on Tests of the Pecking Order Theory. *Financial Management (Wiley-Blackwell)*, 39(2), 733-756.

- Degrazia, D. (1995). Value theory and the best interests standard 1. *Bioethics*, 9(1), 50-61.
- Deotto, F., & Fontana, G. (2017). The Future of Sacco and Vanzetti. *Massachusetts Review*, 58(4), 650.
- Dirar, S.A., Berhanu, T., Getachew, D. & Azadi, H. (2015). Financial product development and members' voluntary saving behavior in saving and credit cooperatives in Tigray: A case study in Endamohoni Woreda. *Journal of Cogent Economics & Finance*, 5(1), 21-34.
- Dixon, M. (2006). Rethinking Financial Capability: Lessons from economic psychology and behavioral finance. *Economics*, 142, 310-339.
- Ebisa, D. (2012). The effects of post 1991 Era financial sector deregulations in Ethiopia: An inspirational guide for agribusiness. *Basic Research Journal of Agricultural Science and Review*, 1, 81-87.
- Emmons, W.R. & Schmid, F.A (2004). *When For Profits and Not For Profits Compete: Theory and Empirical Evidence from Retail Banking: Working Paper Series*, Federal Reserve Bank of St. Louis.
- Eric Boyd, D., & Kannan, P. K. (2018). When Does Third-Party Recognition for Design Excellence Affect Financial Performance in Business-to-Business Markets?. *Journal Of Marketing*, 82(3), 108-123
- Esho, N., Kofman, P. & Sharpe, I.G. (2005). Diversification, fee income and credit union risk. *Journal of Financial Services Research*, 27, 259-81.
- Essendi, K.S. (2013). *The effect of credit risk management on loans portfolio among Saccos in Kenya*. Retrieved from <http://chss.uonbi.ac.ke/sites/default/files/chss/>

- Fabiano, A., Ferraresida, A.A. & Gerharda, A. (2016). Evaluating credit union members' perception of service quality through service innovation. *RAI Management and Innovation Magazine*, 13(4), 242-250.
- Fama, E. & Jensen, M. (1983). Separation of Ownership and Control, *Journal of Law and Economics*, 26, 301-326.
- Feinberg, R.M. (2001). The competitive role of credit unions in small local financial services markets. *Review of Economics and Statistics*, 83: 560-63.
- Ferguson, C. and McKillop, D.G. (1997). *The Strategic Development of Credit Unions*. Chichester: John Wiley.
- Fernandes, D. (2014). Taking Risk, Credit Unions Push Student Loans. *Banking Strategies Daily*, 3.
- Fessler, P., Schurz, M., Wagner, K. and Weber, B. (2007). Financial Capability of Austrian Households. *Monetary Policy and the Economy*; Q3/07:50-67.
- Financial Services Authority (2008). *Financial Capability: A Behavioural Economics Perspective*. Prepared for the FSA by de Meza, D., Irlenbusch, B. and Reyniers, London: D., School of Economics.
- Fisher, A. A., Laing, J., & Stoeckel, J. (1985). Guidelines for Overcoming Design Problems in Family Planning Operations Research. *Studies in Family Planning*, 16(2).
- Fox, J., Bartholomae, S. and Lee, J. (2005). Building the Case for Financial education. *The journal of consumer affairs*: 39(1): 195-214

- Friedrich, W. R. (2013). *The Credit Unions. Fifth (1887) edition, translated from the German by Konrad Engelmann*. Raiffeisen Printing & Publishing Company, Neuwied on the Rhine: Germany.
- FSD Kenya (2012). *Transforming Microfinance in Kenya: The Experience of Faulu Kenya and Kenya Women Finance Trust*. February 2012, Nairobi, FSD
- Glosser, A. J. (1994). "The Creation of BancoSol in Bolivia," in Maria Otero and Elisabeth Rhyne, eds., *The New World of Microenterprise Finance*. Conn. West Hartford: Kumarian Press.
- Gloukoviezoff, G. (2009). *Critique of financial education*, presented at the MutualLearning.Gomez: Yubero,
- Gogo, P.A. & Oluoch, O. (2017). Effect of savings and credit co-operative societies' financial services on demand for credit by members - A Survey of Deposit Taking Saccos in Nairobi. *International Journal of Social Sciences and Information Technology*, 3(3), 2410-2434.
- Gomber, P., Kauffman, R. J., Parker, C., & Weber, B. W. (2018). On the Fintech Revolution: Interpreting the Forces of Innovation, Disruption, and Transformation in Financial Services. *Journal Of Management Information Systems*, 35(1), 220-265.
- Harelimana, J. B. & Gasheja, F. (2016). Analysis of Loan Portfolio Management for Financial Profitability and Sustainability of Umwalimu SACCO in Rwanda. *British Journal of Economics, Management & Trade* 15(4), 1-16.
- Hellman, T.F., Murdock, K.C., & Stiglitz, J.E. (2000). Liberalization, moral hazard in banking and prudential regulation: are capital requirements enough? *American Economic Review*, 90: 147 65.

- Hollis, A. & Arthur, S. (2009). The Life-cycle of a Microfinance Institution: the Irish Loan Funds. *Journal of Economic Behavior and Organization*, 46(3), 29-31.
- Ian, Mac Pherson . (2011). *Hands Around the Globe: A History of the International Credit*
- Institute of Financial Management and Research (2016). *Role of Voluntary Savings in SHG / SHG members: An analysis in Tamil Nadu & Karnataka*. Retrieved from <https://www.nabard.org/demo/auth/writereaddata/tender/2009161904VoluntarySavingsinSHGsEng.pdf>
- Iruguthu, E. W. (2014). *Factors that influence customer satisfaction in savings and credit cooperatives (SACCOs) in Kenya: A Case Study of Balizi Sacco*. Retrieved from <http://erepo.usiu.ac.ke/>
- Ishengoma, E. K., & Towo, N. N. (2016). Bank requirements and governance for savings and credit co-operative societies (SACCOS) in Tanzania and Kenya. *Enterprise Development & Microfinance*, 27(3), 236-254.
- J. Carroll Moody & Gilbert C. Fite (2005). *The Credit Union Movement: Origins and*
- Jackson, T. & Michaelis, L. (2003). *Policies for Sustainable Consumption*. A report to the Sustainable Development Commission. UK.
- Jensen, M. C., Meckling, W. H. (1999). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3, 305-360.
- Johnson, E. & Sherraden, M. (2006). *From Financial Literacy to Financial Capability among Youth. Draft Working Paper 06-11*, Centre for Social Development, Washington University: St Louis.

- Joseph Rowntree Foundation. (2001). *Tackling financial exclusion in disadvantaged areas*. Joseph Rowntree Foundation.
- Kamau, C. W. (2014). *Effects of Sacco services on investment by households in Kiambu County, Kenya*. Retrieved from <http://erepository.uonbi.ac.ke/bitstream/handle/11295/75450/>
- Kempson, E. Whyley, C, Caskey, J. & Collard, S. (2014). *In or Out? Financial Exclusion: A literature and Research Review*. London: Financial Services Authority.
- Kempton, E., & Viren, M. (2014), Social security and household saving in an international cross section. *American Economic Review*, 73, 12-17.
- Kerubo, O. C., & Kinoti, M. W. (2012). Factors Contributing Towards Adoption of Green Marketing Practices in the Mobile Phone Service Providers in Kenya. *DBA Africa Management Review*, 2(1), 42-55.
- Korczak, D. (2004). *Money Advice and Budgeting Service. Peer Review in the Field of Social Inclusion Policies on behalf of European Commission*. Europe: DG Employment and Social Affairs.
- Korir, A. (2017). Effect of Service Quality on Competitive Strategy in Deposit Taking Savings and Credit Co-Operatives in Kericho County, Kenya. *International Journal of Recent Research in Commerce Economics and Management*, 4(3), 1-12.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*. New Delhi: New Age Int Publishers.
- Kourmoussi, N., M, G., Tzavara, C., K.K., Mandrikas, A., C, E., & Koutras, V. (2018). Students' Psychosocial Empowerment with the 'Steps for Life' Personal and

- Social Skills Greek Elementary Programme. *International Electronic Journal Of Elementary Education*, 10(5), 535-549.
- Lyons, A. & Neelakantan, U. (2008). Potential and Pitfalls of Applying Theory to the Practice of Financial Education. *The Journal of Consumer Affairs*, 42(1), 106-112.
- Lyons, A.C., Chang, Y. & Scherpf, E.M. (2006). Translating Financial Education into Behavior Change for Low-Income Populations. *Financial Counseling and Planning*, 17(2), 27-45.
- MacPherson, I. (1998). The Dynamics of Credit Unions: Explaining Diversity in the International Credit Union Movement, *International Co-operative Banking Association Journal*, 10, 95-107.
- Magali, J.J. (2014). Effectiveness of Loan Portfolio Management in Rural SACCOS: Evidence from Tanzania. *Business and Economic Research*, 4(1), 299-312.
- Magill, J.H. (2013). A Formal-Sector Alternative for Financing Microenterprise Development" in *Rhyne and Otero's New World of Microenterprise Finance*, 1994, p. 149.
- Manyara, KM. (2003). *The development of co-operative law and policy in Kenya*. Nairobi: Oscan printers.
- Marion, P. J. (1987). *Building Successful Financial Systems: The Role of Credit Unions in Financial Sector Development*. Washington, DC: WOCCU.
- Matemilola, B.T. & Bany-Ariffin, A.N (2011). Pecking Order Theory of Capital Structure: Empirical Evidence from Dynamic Panel Data. *International Journal on GSTF Business Review*, 1 (1), 185–189.

- Mbonimpa, E.R. (2015). Role of voluntary savings and loans in improving socio-economic conditions of pro-poor people in rural area: A Case study of CARE International in Busasamana Sector, Nyanza District: 2009-2013. *East African Journal of Science and Technology*, 5(2), 121-131.
- MOCDM. (2012). *Achievements, frequently asked questions*. Retrieved form <http://www.cooperative.go.ke>
- Mommartz, R. & Holtmann, M. (1993). *Analyzing the Efficiency of Credit-Granting NGOs: A Technical Guide*; Inter-American Development Bank, and Frankfurt: Washington: IPC.
- Moody, J. C. & Fite, G.C. (1984). *The Credit Union Movement: Origins and Development, 1850-1980*. IA:Kendall/Hunt Publishing Company: Dubuque.
- Mook, L., Maiorano, J., & Quarter, J. (2015). Credit Unions. *Nonprofit & Voluntary Sector Quarterly*, 44(4), 814-831.
- Mugambi, R., Njeru. P., & Memba. S., (2016) Effect of working capital management practices on financial performance: A study of small scale enterprises in Kisii South District, Kenya. *African Journal of Business Management* 6(18), 5807-5817.
- Mugenda, O., & Mugenda, A. (2004). *Research Methods: Qualitative and Quantitative Approaches*. Nairobi: Africa Center of Technology Studies, (ACTS).
- Mugenda, O., & Mugenda, A. (2005). *Research Methods: Qualitative and Quantitative Approaches* : Nairobi: Africa Center of Technology Studies, (ACTS),
- Munyoki, J. M. (2007). *The Effects of Technology Transfer on Organizational Performance: A Case of Medium and Large Manufacturing Firms in Kenya (unpublished thesis)*. Kenya: University of Nairobi.

- Muraguri, M. D., & Irura, N. S. (2014). Analysis Of Factors Influencing Investment Decisions Of Sacco Funds In Kenya. *Clear International Journal Of Research In Commerce & Management*, 5(7), 6-9.
- Murray, J.D. & White, R.W. (2001). Economies of scale and deposit taking institutions in Canada. *Journal of Money, Credit and Banking*, 12, 58-70.
- Mwai, J.N. & Okatch, B. (2017). Impact of Saccos' services in poverty eradication among farmers in Muranga County, Kenya. *International Journal of Social Sciences and Information Technology*, 2(11), 1384-1399.
- Mwangi, D. W. (2015). *Effects of investment decisions on efficiency of deposit taking savings and credit co-operative societies in Nairobi County*. Retrieved from <http://erepository.uonbi.ac.ke/bitstream/handle/11295/93963>
- Ndambiri, J.M., Munene, E.N. & Wanjohi, S.M. (2017). Effect of Loan Portfolio Characteristics on the Level of Non-performing Loans for Savings and Credit Co-operative Societies in Kirinyaga County Kenya, *International Journal of Finance and Banking Research*. 3(5), 58-69.
- Nnyanja, W. (2017). *The role of saving and credit cooperatives in improving household income: The Case for Teachers in Mukono District*. Retrieved from <https://utamu.ac.ug>
- Norland-Tilburg, E. V. (1990). Controlling Error in Evaluation Instruments. *Journal of Extension*, 28(2), 32-39.
- Nussbaum, M. and Sen, A. (eds.) (1993). *The Quality of Life*. Oxford: Clarendon Press.

- O'Cass, A., Weerawardena, J., & Julian, C.C. (2004). *Industry structure in marketing strategy and brand performance*, e-publications, Southern Cross University. Retrieved from epubs.scu.edu.au/cgi/.
- O'Donnell, N. & Keeney, M.J. (2009). *Financial Capability: New Evidence for Ireland*. Central Bank & Financial Services. Dublin, Ireland: Central Bank of Ireland.
- Okello D (2006). *An approach for building and financing pro-poor; ICT infrastructure pro-poor Community-driven Networks*. Uganda:Kampala.
- Omer, T. C., Bedard, J. C., & Falsetta, D. (2006). Auditor-Provided Tax Services: The Effects of a Changing Regulatory Environment. *Accounting Review*, 81(5), 1095-1117.
- Onchangwa, G.A (2012). *The influence of savings in cooperative societies on members*. Nairobi: Osca publishers.
- Ondieki, A.N (2011),*Effect of external financing on financial performance of savings and credit societies*. Retrieved from erepo.usiu.ac.ke/
- Osoti, R. N. (2014). *Effect of the growth of savings and credit co-operative societies' front office services activity on demand for credit by members*. Retrieved from <http://erepository.uonbi.ac.ke/bitstream/handle/11295/75252/>
- Owen, L. (2002). Introduction to Survey Research Design. *SRL Fall 2002 Seminar Series*: <http://www.srl.uic.edu>
- Owino, C. A. (2015). *Service quality and customer loyalty in deposit taking Saccos in Kenya*. Retrieved from erepository.uonbi.ac.ke/handle/11295/102490

- Pana, E. & Mukherjee, T. (2010). Credit Unions as Liquidity Creators, *Paper presented at Financial Management Association Annual Meeting*. Jan. 2010: New York.
- PEARLS. (2002). *Consolidated Report for 20 Credit Unions*. World Council of Credit Unions Inc. Quito: Ecuador.
- Polgar, S., & Thomas, S. A. (2009). *Introduction to Research in the Health Sciences (5th ed.)*. UK: Churchill Livingstone Elsevier.
- Pouryousefi, S., & Frooman, J. (2017). The Problem of Unilateralism in Agency Theory: Towards a Bilateral Formulation. *Business Ethics Quarterly*, 27(2), 163-182
- Rasmusen, E. (1988). Mutual Banks and Stock Banks. *Journal of Law and Economics*, 31, 395-421.
- Republic of Kenya (2010). *The SACCO societies Deposit taking regulations*. Nairobi: Government Printers.
- Richardson, D. C. (2014). *Model Credit Unions into the Twenty-First Century*. Westley: ACCION International.
- Rondini, A., Pezzotta, G., Cavalieri, S., Ouertani, M., & Pirola, F. (2018). Standardizing delivery processes to support service transformation: A case of a multinational manufacturing firm. *Computers in Industry*, 100(1), 115-128
- Sanne, C. (2002). Willing Consumers – or Locked-in? Policies for Sustainable Consumption *Ecological Economics*, 42, 273-287.
- Sanne, C. (2002). Willing Consumers – or Locked-in? Policies for Sustainable Consumption *Ecological Economics*, 42, 273-287.

- SASRA (2013). *Sacco Societies Regulatory Authority Legal mandate*. Retrieved o from <http://www.sasra.go.ke/downloads/licensedsaccos.pdf>
- Saunders, M., Lewis, P. & Thornhill, A. (2007). *Research Methods for Business Students*. 4th Edition. Harlow: Financial Times Prentice Hall.
- Schmidt, R.H. & C.-P. Zeitinger (1996). The Efficiency of Credit-Granting NGOs in Latin America. *Savings and Development*, 20, 353-384.
- Servon, L.J. & Kaestner, R. (2008). Consumer Financial Literacy and the Impact of Online Banking on the Financial Behavior of Lower-Income Bank Customers. *The Journal of Consumer Affairs*, 42(2), 271-305.
- Smith, D.M. & Woodbury, S.A. (2010). *Withstanding a financial firestorm: credit unions vs. banks*. New York: Filene Research Institute.
- Stiglitz, J. E. (1990). Peer Monitoring and Credit Markets. *The World Bank Economic Review*, 4, 351-366.
- Tanaomi, M & Asaadi, R. (2017). A Comparative Study of Faculty Members' Career Advancement (Promotion) Systems in the United States and the Islamic Republic of Iran. *International Journal of Higher Education*, 6(4), 111-121.
- Thuo, J. K. (2011). *Customer Relationship Management Practices and Competitiveness of Commercial Banks in Kenya (unpublished thesis)*. Kenya: University of Nairobi.
- Tianjiao, Q. (2014). Product Diversification and Market Value of Large International Firms: A Macroenvironmental Perspective. *Journal Of International Marketing*, 22(4), 86-107.

- Tokle, R. & Tokle, J. (2000). The influence of credit union and savings and loan competition on bank deposit rates in Idaho and Montana. *Review of Industrial Organization*, 17, 427-39.
- Varanasi, M. P. (2005). Diversification Strategy and Firm Performance. *IIMB Management Review (Indian Institute of Management Bangalore)*, 17(3), 97-104.
- Wall, L. D. (2010). Prudential Discipline for Financial Firms: Micro, Macro, and Market Structures. *Working Paper Series (Federal Reserve Bank of Atlanta)*, (9), 1-53.
- Walliman, N. (2011). *Your Research Project (3rd ed.)*. London: Sage Publications Ltd.
- Wamalwa, N & Jagongo, A. (2017). Loan Portfolio Management and Firm Performance: Theoretical Paper Review. *International Journal of Management and Commerce Innovations*, 5(2), 638-643.
- Weichieh, S., & Tsang, E. K. (2015). Product Diversification And Financial Performance: The Moderating Role Of Secondary Stakeholders. *Academy Of Management Journal*, 58(4), 1128-1148.
- Willis, L.E. (2009). Evidence and Ideology in Assessing the Effectiveness of Financial Literacy Education, *San Diego Law Review*, 415 (46).
- World Council of Credit Unions (2002). *PEARLS Consolidated Report for 17 Credit Unions. Rural Credit Union Project*. Managua: Nicaragua.
- Worthington, A.C. (2012). Frontier efficiency measurement in deposit-taking financial mutuals: A review of techniques, applications, and future research directions: *Annals of Public and Cooperative Economics*, 81: 39-75.
- Yaron, K. (2012). *Outreach and Sustainability of Six Rural Financial Institutions: Sub-Saharan Africa*. *Review of Industrial Organization*, 25, 143-167.

Yeronet et al. (2010) The Euro, The Pound And The Shell In Our Pockets: Rationales For Complementary Currencies In A Global Economy, *New Political Economy*, 5(2), 227-246

Zeller, M. (2013). *Models of Rural Financial Institutions*, Institute of Rural Development, Göttingen, Georg-August University,

Zikmund, W. G. (2003). *Exploring Marketing Research* (7th ed.). New York: Thomson South Western.

APPENDICES

Appendix I: Letter of Introduction



JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

Setting trends in Higher Education, Research and Innovation

JANE KAARI KIBANGA

P.O BOX 654-00502

KAREN

NAIROBI

Dear Respondent,

RE:DATA COLLECTION

I am a student at the Jomo Kenyatta University of Agriculture and Technology currently undertaking a study on the **EFFECTS OF FINANCIAL EMPOWERMENT ON MEMBER ADVANCEMENT OF LICENSED DEPOSIT TAKING SACCOS IN NAIROBI COUNTY KENYA**, as a partial fulfillment for the requirements of the **AWARD OF DEGREE OF DOCTOR OF PHILOSOPHY IN BUSINESS ADMINISTRATION**.

You have been selected to participate in this study and I will highly appreciate if you spare a few minutes to respond to the attached questionnaire. Your responses will be

treated with utmost confidentiality and will only be used for academic purposes in this study.

Thank you in advance for your cooperation

Yours faithfully

Jane Kaari Kibanga

Ph.D Student-JKUAT

Appendix II: Questionnaire

PART I: Background Information

1. Name _____ of _____ Institution

2. Gender Male Female

3. Please indicate the position you hold in the Sacco

CEO/Manager

Deputy CEO/Manager

Others specify

4. How long have you been in this position?

Less than 1 Year 4-6 years

1-3 years Above 6 years

5. Please indicate with a tick your highest level of Education

Certificate Master's Degree

Diploma PhD/Doctorate

Bachelor's Degree

6. Please indicate the number of branches in the country

.....

PART II: FINANCIAL SERVICES.

1. Please tick as appropriate

Saccos should always be committed to serving members with diversified products and

services Yes No

2. Which of the following are the common products offered in licensed deposit taking Saccos?

- i. Savings accounts []
- ii. Short term advances []
- iii. Salary processing []
- iv. Fixed deposits []

3. Please tick (✓) the extent to which you agree with the following statements using the scales given below

(5) Strongly Agree (4) Agree (3) Disagree (2) Strongly Disagree (1) Do not know

	Description	5	4	3	2	1
I	Deposit taking Saccos offer products with competitive interest rates					
Ii	Deposit taking Saccos have attracted most of the marginalized clients					
Iii	Benefit of savings mobilization is the supply of funds for on lending.					
Iv	Product diversification meet the needs of a diverse membership					
V	Aggressive marketing avail new products to members of the Sacco					
Vi	Front office service in DTS improves its physical image					

PART III : CREDIT PORTFOLIO ADMINISTRATION

1. Please indicate the growth in credit portfolio for the last three years

Year	2012/13	2013/14	2014/15
Credit portfolio(ksh)			

2 Please tick (√) the extent to which you agree with the following statements using the scales given below

(5) Strongly Agree (4) Agree (3) Disagree (2) Strongly Disagree (1) Do not know

	Description	5	4	3	2	1
I	Deposit taking Credit policy correspond to Woccu prudential standards					
Ii	DTS include loan classification in credit management practices					
Iii	Saccos doing deposit taking business seek large savings deposits to cover loan risks					
Iv	Members' financing needs determine credit diversification					
V	DTS loans are transparent, with no hidden fees					
Vi	Credit Functions are centralized in the credit department					

PART IV: RISK MANANEMENT

1. Please tick as appropriate

The element of risk is found in all phases of Deposit taking operations

Yes [] No []

2. Please tick (√) the extent to which you agree with the following statements using the scales given below

(5) Strongly Agree (4) Agree (3) Disagree (2) Strongly Disagree (1) Do not know

	Description	5	4	3	2	1
I	Operational risks can undermine the financial position of deposit taking Sacco if not adequately mitigated					
Ii	Deposit taking Saccos operate in a competitive world and must follow business practices to protect Assets against Risks					
Iii	The dynamic approach of risk management allow Deposit taking Saccos to face new risks and to introduce them in the risk management policy					
IV	A comprehensive approach to risk management reduce the risk of loss, build credibility and create opportunities for growth among members					
V	Internal controls in a deposit taking Sacco are part of the control system that ensures accuracy of records and efficient operations					
Vi	DTS have adopted a new approach to Risk management					

PART V: VOLUNTARY SAVINGS

1. Please indicate the growth in savings deposits for the last three years

Year	2012/13	2013/14	2014/15
Savings deposits(ksh)			

2. Please tick (√) the extent to which you agree with the following statements using the scales given below

(5)Strongly Agree(4) Agree (3) Disagree (2) Strongly Disagree (1) Do not know

	Description	5	4	3	2	1
I	Savings mobilization in Deposit taking Saccos is accompanied by Sound institutional controls and structures					
Ii	The demand for liquidity is more important to most middle level members of DTS than the demand for credit.					
Ii	Financial system in DTS subsector recognize the importance of savings to the poor					
Iv	Financial costs relating to voluntary savings in DTS are easily identifiable					
V	Savings products are tailored to respond to demands of particular groups of members					
Vi	Deposit taking Saccos have become true financial intermediaries, accumulating savings deposits to build lending portfolios					

PART VI: REGULATORY ENVIRONMENT

1. Which of the following is required for effective supervision?

- i. Sound legal system []
- ii. Formalized audit []
- iii. Monitoring capacity []
- iv. Regulatory framework []
- v. Authority to enforce law []

2. Please tick (✓) the extent to which you agree with the following statements using the scales given below

(5) Strongly Agree (4) Agree (3) Disagree (2) Strongly Disagree (1) Do not know

	Description	5	4	3	2	1
I	DTS must install financial systems before licensing					
Ii	Governance enables transition from management to oversight board					
Iii	DTS comply to the structural changes in the financial statements					
Iv	Institutional capital is reserved to cover operating risks					
V	Institutions mobilizing deposits are supervised by a regulatory authority					

PART VII: MEMBER ADVANCEMENT

1. Please tick as appropriate

Members save and borrow credit from Saccos to improve their socio-economic conditions by investing in assets for the future Yes [] No []

2. Please tick (√) the extent to which you agree with the following statements using the scales given below

(5) Strongly Agree (4) Agree (3) Disagree (2) Strongly Disagree (1) Do not know

	Description	5	4	3	2	1
I	To meet standards for capital adequacy, DTS must make surplus to build capital reserves					
Ii	Members of DTS contribute savings deposits to gain access to the financial products and services					
Iii	Members of Deposit taking Saccos expect to receive dividends on their savings deposits at the end of a financial period					
Iv	Deposit taking Saccos hold to the principle that internally generated savings create sustainable supply of funds invested in their members					
V	DTS business contribute largely to the economic development of the country					
Vi	Voluntary savings in Saccos enable households to smooth consumption in periods of irregular income flows					

Thank you for your time and cooperation

Appendix III: Interview Guide Questions

Interview questions for licensed deposit taking Saccos

1. How has your Sacco Financially empowered your members with diverse financial products which may have changed their financial behavior? Give us an example to support your answer.....
.....
.....
2. What are the five categories of Loan classification used to measure performance? Give us breakdown these categories.....
.....
.....
3. Name some situation in which a service provider failed to deliver quick service to members. Tell us about a time when you failed to respond with speed and convenience

.....
.....
.....
4. Tell us about an appealing savings product you developed for members of diverse income groups

.....
.....
.....
5. How have you established prudential financial management disciplines to protect savings and the existence of the institution?

.....
.....
.....

6. What was the most significant source of finance you managed to finance growing loan demand portfolios?

.....
.....
.....

Appendix 1V: Licensed Deposit Taking Saccos In Nairobi City

COUNTY, KENYA FOR THE FINANCIAL YEAR ENDING DECEMBER 2015

1. Afya sacco society ltd	p.o.box 11607– 00400, Nairobi.
2. Airport sacco society ltd	p.o. box,19001 - 00501 Nairobi
3. Ardhi sacco society ltd	p.o. box 28782 - 00200, Nairobi.
4. Asili sacco society lt	p.o.box 49064 – 00100, Nairobi.
5. Chai sacco society ltd	p.o.box 47815 – 00100, Nairobi.
6. Chuna sacco society ltd	p.o.box 30197 – 00100, Nairobi.
7. Comoco sacco society ltd	p.o. box 30135 – 00100, Nairobi
8. Elimu sacco society ltd	p.o box 10073 - 00100, Nairobi.
9. Fundilima sacco society ltd	p.o.box 62000 – 00200, Nairobi.
10. Harambee sacco society ltd	p.o.box 47815 – 00100, Nairobi.
11. Hazina sacco society ltd	p.o.box 59877 –00200, Nairobi.
12. Jamii sacco society ltd	p.o.box 57929 –00200, Nairobi.
13. Kenpipe sacco society ltd	p.o.box 314 – 00507, Nairobi.
14. Kenversity sacco society ltd	p.o.box 10263 – 00100, Nairobi.
15. Kenya bankers sacco society ltd	p.o.box 73236 – 00200, Nairobi
16. Kenya police sacco society ltd	p.o.box 51042 – 00200, Nairobi
17. Kingdom sacco society ltd	p.o.box 30062 – 00100, Nairobi.
18. Magereza sacco society ltd	p.o.box 54582 – 10100 Nairobi
19. Maisha Bora sacco society ltd	p.o.box 24577 – 00200, Nairobi.
20. Miliki sacco society ltd	p.o.box 43582 – 10100 Nairobi
21. Mwalimu national sacco society ltd	p.o.box 62641 – 00200, Nairobi.
22. Mwito sacco society ltd	p.o.box 56763 – 00200, Nairobi.
23. Nacico sacco society ltd	p.o.box 34525 – 00100, Nairobi.
24. Nafaka sacco society ltd	p.o.box 30586 – 00100, Nairobi.
25. Nakusacco society ltd	p.o.box 56763 –00200, Nairobi.
26. Nassefu sacco society ltd	p.o.box 43338 – 00100, Nairobi.

- | | |
|--|---------------------------------|
| 27. Nation sacco society ltd | p.o.box 22022 – 00400, Nairobi. |
| 28. Nest sacco society ltd | p.o.box 34390 – 00100, Nairobi. |
| 29. Safaricom sacco society ltd | p.o.box 66827 – 00800, Nairobi. |
| 30. Sheria sacco society ltd | p.o.box 34390 – 00100, Nairobi. |
| 31. Shirika sacco society ltd | p.o box 43429-00100, Nairobi. |
| 32. Stima sacco society ltd | p.o.box 75629 – 00100, Nairobi. |
| 33. Telepost sacco society ltd | p.o. box 49557 – 00100, Nairobi |
| 34. Transcomsacco society ltd | p.o.box 62629 – 00100, Nairobi. |
| 35. Ufanisi sacco society ltd | p.o box 2973-00200, Nairobi. |
| 36. Ufundisacco society ltd | p.o.box 44390 – 00100, Nairobi. |
| 37. Ukristo na ufanisi wa angalicana sacco society ltd | p.o box 872-00605, Nairobi. |
| 38. Ukulima sacco society ltd | p.o.box 44071 – 00100, Nairobi. |
| 39. United nations sacco society ltd | p.o.box 30552 – 00100, Nairobi |
| 40. Wanaanga sacco society ltd | p.o.box 34680 – 00501, Nairobi. |
| 41. Wanandege sacco society ltd | p.o.box 19074 -00501, Nairobi. |
| 42. Waumini sacco society ltd | p.o.box 66121 – 00800, Nairobi. |

Appendix V: Research Permit

THIS IS TO CERTIFY THAT: **Permit No: NACOSTI/P/16/77771/15022**

MS. JANE KAARI KIBANGA **Date Of Issue : 8th December, 2016**

of JOMO KENYATTA UNIVERSITY OF **Fee Received :Ksh 2000**

AGRICULTURE AND TECHNOLOGY

0-542 NGONG, has been permitted to

conduct research in Nairobi County.

on the topic: EFFECT OF FINANCIAL

EMPOWERMENT ON MEMBER

ADVANCEMENT OF LICENSED DEPOSIT

TAKING SACCOS IN NAIROBI COUNTY

KENYA

for the period ending:

7th December, 2017

Applicant's

Signature

Director General

National Commission for Science,

Technology & Innovation

