CAPITAL ADEQUACY FRAMEWORK, FUNDS ALLOCATION STRATEGY AND FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCOS IN KENYA

JOHN CHERUIYOT NG'ENO

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SEPTEMBER, 2019

DECLARATION

I declare that this thesis is my original work and has not been presented in any other university.

Signed..... Date.....

John Cheruiyot Ng'eno

Bus-4-1761-1/2014

We confirm that the work reported in this thesis was carried out by the candidate under our supervision.

Signature .....Date.....

Prof. George K. Kingoriah

School of Business and Economics

Kenya Methodist University

Signature……Date……

Prof. Thomas Senaji

School of Business and Economics

Kenya Methodist University

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DEDICATION

This thesis is dedicated to my entire family for their support and understanding during the period of my PhD studies.

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ABSTRACT

This study was aimed at establishing the relationship between capital adequacy framework and financial performance of deposit taking savings and credit cooperatives societies in Kenya. There is a declining trend of deposit taking SACCOs in Kenya. In 2016,164 SACCOs were licensed to operate as deposit taking SACCOs in Kenya. The study intention was to conduct a census survey but the responses were less. Only 111 deposit taking societies responded. The government had introduced various legislations attempting to streamline the operations of cooperative entity. Sustainability of cooperative movement depends on various factors one of which being capital adequacy. In this study the influence of six dimensions of capital adequacy framework namely: internal financing, external financing, portfolio selection, credit management, risk management and managerial capability was examined. A descriptive survey was conducted using questionnaires to collect data from the respondents. Pilot survey was conducted on 12 deposit taking SACCOs to ensure that questionnaire serve the intended purpose. Data analysis was carried out using both descriptive and inferential statistics with the aid of statistical package for social sciences (SPSS 23). Correlation and regression analysis were used to establish the relationship between research variables. It was found that internal financing, credit management; portfolio selection, risk management and managerial capability had positive effect on financial performance of deposit taking SACCOs in Kenya. This means that as the five variables increase then financial performance will be increase. External financing had negatively influenced on the financial performance. With prudent external financing, deposit taking SACCOs will attain favourable outcome. Funds allocation was found to have a significant moderating influence on the relationship between capital adequacy framework and financial performance. Hypotheses were tested at 5 percent significance level. The null hypotheses were rejected and it was established that capital adequacy framework and moderating variables influenced significantly financial performance. It is recommended that focus on capital adequacy framework will enhance financial performance of deposit taking SACCOs in Kenya.

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LIST OF ABBREVIATIONS AND ACRONYMS

ACCOSSCA	African Confederation of Cooperative Society Savings and Credit Association
ATM	Automated Teller Machine
BOSA	Back Office Service Activity
CEO	Chief Executive Officer
DTSs	Deposit Taking Saccos
FAS	Funds Allocation Strategy
FOSA	Front Office Service Activity
HRM	Human Resource Manager
ICA	International Cooperative Alliance
KUSCCO	Kenya Union of Savings and Credit Cooperative
PEARLS	Protection Effective financial structure, Quality, Rates of return and cost, Liquidity and signs of growth
SACCO	Savings and Credit Cooperative Societies
SASRA	Sacco Societies Regulatory Authority
WOCCU	World Council of Credit Unions

ABSTRACT

This study was aimed at establishing the relationship between capital adequacy framework and financial performance of deposit taking savings and credit cooperatives societies in Kenya. There is a declining trend of deposit taking SACCOs in Kenya. In 2016,164 SACCOs were licensed to operate as deposit taking SACCOs in Kenya. The study intention was to conduct a census survey but the responses were less. Only 111 deposit taking societies responded. The government had introduced various legislations attempting to streamline the operations of cooperative entity. Sustainability of cooperative movement depends on various factors one of which being capital adequacy. In this study the influence of six dimensions of capital adequacy framework namely: internal financing, external financing, portfolio selection, credit management, risk management and managerial capability was examined. A descriptive survey was conducted using questionnaires to collect data from the respondents. Pilot survey was conducted on 12 deposit taking SACCOs to ensure that questionnaire serve the intended purpose. Data analysis was carried out using both descriptive and inferential statistics with the aid of statistical package for social sciences (SPSS 23). Correlation and regression analysis were used to establish the relationship between research variables. It was found that internal financing, credit management; portfolio selection, risk management and managerial capability had positive effect on financial performance of deposit taking SACCOs in Kenya. This means that as the five variables increase then financial performance will be increase. External financing had negatively influenced on the financial performance. With prudent external financing, deposit taking SACCOs will attain favourable outcome. Funds allocation was found to have a significant moderating influence on the relationship between capital adequacy framework and financial performance. Hypotheses were tested at 5 percent significance level. The null hypotheses were rejected and it was established that capital adequacy framework and moderating variables influenced significantly financial performance. It is recommended that focus on capital adequacy framework will enhance financial performance of deposit taking SACCOs in Kenya.

CHAPTER ONE

INTRODUCTION

This study focused on the influence of capital adequacy framework and funds allocation strategy and their influence on financial performance of deposit taking SACCOs in Kenya. Chapter one provides the historical background of the cooperative movement, especially savings and credit cooperative society. It also included the problem statement, research objectives, hypotheses, scope and significance of the study.

1.1 Background of the Study

Cooperative enterprise started in 15th century. The Roche dale Society of equitable pioneers in 1844 introduced the modern cooperative movement. According to global cooperative movement report 2007, it has employed 100 million people in the world. The top 300 largest cooperative enterprises had turnover of up to US$ 963 billion (Mazzarol, 2014).

A co-operative entity is a unique form of business model which has different features from private investment firm. There are seven principles that guide it. The International Cooperative Alliance (ICA) formulated these principles that should guide the formation, organisation and activities of a cooperative entity. These principles include voluntary and open membership, democratic member control, member economic participation, autonomy and independence, education, training and information, cooperation among cooperatives and concern for community.

Cooperatives also embrace the values of self-help, honesty, openness, self-responsibility, social responsibility, transparency and accountability (International cooperative Alliance [ICA], 2015). These values are the building blocks of strong cooperative enterprise, without which cooperative enterprises may not achieve their intended objectives. The major aim of these principles is to benefit cooperative members through patronage. They get services at a subsidise price. The wider community cannot benefit from any society as a charity, political, or religious causes it involves cost. However, other businesses benefit from co-operative enterprise at a cost. For instance, when an entity invests in a petrol station business it will value all consumers at the prevailing market prices.

The first financial type of cooperative movement started in Germany between 1850s and 1860s. The link of this kind of movement with communism made a difference to spread the agreeable development all through the nineteenth century in Britain and at that point over Europe, and somewhere else within the twentieth Century. It was introduced to cater for low- income employees in the urban and the poor farmers in the rural areas. A mid agricultural depression within the 1860s in Germany, a social reformer Friedrich Raiffeisen found out that nourishment crisis was caused by other factors (Mazzarol, 2014). He helped hungry agriculturists and their families during crisis. He afterward figured it out that the issue was not nourishment but the agriculturists required credit to assist them in modernising their generation strategies and to transport their produce to markets. Creation of rural credit unions helped break the grip of loan sharks who were exploiting poor farmers. Farmers were not getting any benefit from their farming activities. As a result of credit unions, many farmers modernised their farm operations, resulting in financial gain.

Friedrich Raiffeisen created a modern savings and credit cooperative. It spread all over Europe. The advancement of supplies was enhanced. The cooperative movement gathered momentum. It made a difference and created the present day farmers' economy. During same period, another social reformer, Schultze-Delitsch, introduced similar sort of credit union to cater for town's individuals. It provided credits to empower artisans and a few commerce men to outlive the fast monetary changes. It also handled challenges that went with the mechanical change. Consequently, workers' cooperatives in Belgium, Italy and France developed unequivocally similar business model. Ranchers, dealers and little trade proprietors drove the spread of cooperatives in the urban and rural areas. It flourished well in Europe as well as in North America and Japan. Despite the fact that the roots of the agreeable development lie in communism, the spread of farmers' credit union and retail entities during the nineteenth century was caused entirely by the middle class (Gide, 1992; Birchall 2015).

In 1955, the first credit union was introduced in Ghana to assist rural population in poverty reduction (Ngombe & Mikwamba, 2014). It was introduced by catholic missionaries. The community embraced the new idea which was being spread by parish missionaries. Teachers and trade unionists started their own credit union which spread to other communities and workplaces in the other regions of Ghana. Most of the English-speaking nations in Africa embraced credit union among them were Ghana, Uganda, Nigeria, Tanzania and Kenya. According to Olando, Mbewa and Jagongo (2012), non-English speaking countries in Africa embraced credit unions in 1960s. These countries had seen the benefits accruing from them in other states. The introduction of Savings and Credit Cooperative Society (SACCO) in

Africa and its growth resulted in the formation, in 1965, of the African Confederation of Cooperative Society Savings and Credit Association (ACCOSSCA) intentioned to spur SACCO principles, avail insurance services and also educate their clients on various related issues (Ngombe & Mikwamba, 2014, Borgstrom, 2013).

In Kenya, the European settlers introduced the first co-operative society in 1908 in Kericho County at Lumbwa in Kipkelion Sub County. It was called Lumbwa Cooperative Society. The cooperative society promoted agricultural activities including procuring farm inputs and selling agricultural produce. The first SACCO commenced in 1964 in Kenya. At inception, their common bonds mostly were based on connection with location, livelihood and places of worship. However, the government made a decision requiring all the SACCOs to recruit on their on certain criteria in 1969. The societies based their recruitment on a secure job or business relationship. Consequently, societies introduced a check-off system where payments were channelled directly to the society through employers, processors or marketing organisations triggering emergence of several commodity-based SACCOs in the rural areas (Birchall & Ketilson, 2009). The cooperative societies had District unions which had Union Banking Sections that provided monetary services to the membership and embraced Raiffeisen-type cooperative design which operated at the provincial level with branches (Makori, Munene & Muturi, 2013).

When Kenya attained independence, cooperatives movement was recognised as an apposite tool for economic development. According to Gardeklint (2009), the government supported the quick development and extension of SACCO society movement in the country and today constitutes one of the financial pillars of

the country within the vision 2030 plan. SACCOs promote financial inclusivity in the country. The regions without banking facility will have one. It will enhance saving mobilisation in the remote areas. By 2010, Kenya had more than 5000 SACCOs, registered, with an estimated membership of seven million which collectively mobilised more than KShs. 200 billion (Republic of Kenya, 2008, Ndungu, 2010).

In 1997, SACCOs changed their mode of operation by embracing Front Office Service Activity (FOSA) products which resulted in products diversification from the usual Back Office Service Activity (BOSA) products to Front Office Service Activity (FOSA) products. The products of BOSA comprised long-term and the short-term loans with the former meant for development-related activities and lent for a period of 24-48 months. The latter which is given for either school fees or emergency and attracted a 12% interest per annum on a reducing balance. Front Office Service Activity products include fixed deposit and savings accounts, special accounts and call deposit and have interest rates ranging from 1.5%-5% to per month Waweru (2014) and provide other services through link-ability with banks including cheque clearing and safe custody facilities, standing orders, salary processing, electronic funds transfer and automated teller machines (ATMs) (Edwards & Hulme,1995).

When the deposit taking facility was introduced, the SACCOs' financial services offered are almost similar to commercial banks. It has necessitated the provision of a specific regulatory framework for SACCOs. The introduction of deposit taking business was commenced when government of Kenya enacted the following laws: the SACCO Societies Act (NO.14 of 2008) and the SACCO Societies (Deposit-

Taking SACCO business) Regulations, 2010 both of which regulate the SACCO sector in Kenya. This legislation also established SACCOs Society Regulatory Authority (SASRA) whose mandate is licensing, supervising as well as monitoring deposit taking SACCOs in Kenya (Dawson, 2013; Decker, 2004). Before the introduction of this legislation, the Cooperative Societies Act Rule Number12 of 1997 guided the sector. It was amended in 2004. The diversification of financial services meant that capital adequacy framework plays a crucial role in investing available funds prudently.

Microfinance House Limited (2016) report six months as the average loan waiting period in the SACCOs but it was more than six months because of meagre liquidity position of the SACCOs. As a result, the societies lack adequate capital framework. Both financial as well as non-financial capitals of SACCOs are inadequate for the efficient and effective running of these societies. Therefore, there's require for socially responsive and profitable SACCOs to embrace sensible funds allocation strategies. These are fundamental to improve the money related execution of the SACCOs (Waweru, 2014; Darrough & Stougton, 1990). Inadequate capital frameworks trigger lost cash holding opportunities. When large sums of funds are underutilised in any firm they do not generate any income. Members need the financial return at the close of the accounting period and entities may not be in a good position to meet their money related commitments as and when they fall due. Financial capital comprises internal as well as external finance. These funds need prudent financial management so that the immediate benefit from the investments can be felt by members. In the case of social capital which is non-financial, it involves strategies of managing funds well so that the profit is achievable (Evans &

Branch, 2008). These activities comprise the followings: working capital management, portfolio selection, risk management, managerial capability, governance structure, regulatory requirements and information technology. All these are critical in accomplishing firm objectives.

1.1.1 Capital Adequacy Framework

According to Lipsey and Chrystal (2013), the capital stock consists of financial and non-financial assets utilised during production of goods and services which assets include workshops, machinery, equipment, infrastructure, human resource, strategies, and finances. Since the capital is an input for production, it is a renewable resource but subject to technical changes which may alter its characteristics over a period of time. The financial and non-financial assets are interrelated, as SACCOs often require capital to procure equipment and human resource. The study focused on the capital adequacy; both financial capital and non-financial capital for managing SACCOs in Kenya. These resources are utilised to attain optimum financial return for the members (Croteau, 1963; Cormier, Gordon & Magna, 2004). The capital requirements for each society should be ascertained to enable future planning as adequate capital could avert SACCO failure, where the society cannot meet its financial obligations to pay its membership and other creditors. Return for a member is also influenced by the capital. The society should comply with prescribed minimum capital requirement stipulated under statute (Greuning & Iqbal, 2015). The SACCO Societies Act considers only financial aspects of SACCOs in Kenya. Non-financial aspects were left out in the Act. These also affect financial returns a great deal (Mishkin & Eakins, 2012). This study

carried out the survey on the relationship between capital adequacy framework on financial performance of SACCOs in Kenya.

1.1.2 Funds Allocation Strategy

SACCOs allocate funds to various portfolios. Funds can be invested in either tactical assets or strategic assets. According to Samuelson and Nordhaus (2004), an efficient economy is characterized by consumers getting the most desired category goods and services based on the resource and technologies available in the economy. Efficiency requires the right combination of goods and services to be produced in the economy and their allocation among consumers meet consumer standards (Hyndman & McKillop, 2004). The SACCO Societies Act guides the SACCOs on how to allocate their funds. Investments are not supposed to be more than 40% of their total assets or more than 5% of total deposits. In case of non-earning assets, investments should be less than ten percent of the total assets. Land and buildings should not be more than five percent of the total assets.

1.1.3 Financial Performance

Financial performance is used by regulators to establish financial sustainability of an economic entity. It facilitates identification of societies that are experiencing severe problems so that remedial action may be taken (Hoang, 2014). Members will know whether the investment is viable or not. Investment analysts will use the performance data to advise prospective investors on which SACCOs to select for lending their hard earned cash. Societies also evaluate their own performance over time. The evaluation will determine the outcomes of previous management decisions so that changes can be made where appropriate. Monitoring of performance

consistently will identify existing problems which can be addressed immediately (Gasbarro, Lewis & Dhar, 2013). However, inconsistent monitoring will lead to financial failure in the future (Madura, 2012).

According to Madura (2012), bank regulators inspect commercial banks at least once establish whether the bank is complying with regulations. Its financial condition is taken into consideration. The regulators also occasionally use computerised monitoring systems to analyse information provided by the banks on a quarterly basis. They use CAMELS rating system. In case of SACCOs, they use PEARLS rating system (Gibbins, Richardson & Waterhouse, 2012).

1.1.4 Deposit Taking SACCOs in Kenya

SASRA licensed 164 SACCOs in Kenya to take deposits from their members in 2016. The number of SACCOs licensed in 2015 were 176. This include new licensed societies and previously licensed SACCOs and indicates a declining trend of these SACCOs in the country. SACCO Societies ACT 2008 created Deposit taking SACCOs (DTS) are legal entities created under the SACCO Societies ACT 2008 which also created SASRA to license, monitor and supervise all licensed SACCOs in Kenya.

SACCOs have existed in Kenya for a number of years either as deposit- taking or non-deposit- taking SACCO. A number of deposit-taking societies were licensed in 2014. Since, then the number of Societies is in a declining trend. For example, during 2014, 2015 and 2016, numbers of deposit- taking Societies licensed were 215,176 and 164 respectively. The declining trend needs immediate address to forestall the emerging scenario.

Deposit-taking SACCOs are allowed to offer Front Office Service Activity products whereas non-deposit taking SACCOs offer Back Office Service Activity products. All non-deposit taking SACCOs are under the supervision of Commissioner for Cooperatives whereas DTS are licensed, supervised, monitored and regulated by Society Authority. SACCOs registered under the Cooperative Societies Act, Kenya are also licensed by Society Authority. Therefore, the SACCOs can take deposits from their membership. By December 2012 the SACCO assets were amounting to Kenya Shillings two hundred and ninety three billion with a membership of three million members. At the same period, the total deposits amounted to KShs 213 billion while credit to the membership stood at KShs 221 billion (Ademba, 2013, Goddard, McKillop & Wilson, 2008).

From the above data analysis, it indicates that SACCOs loans to total asset ratio (221/293 = 0.75) is 75% of the total assets. To increase loanable fund, the total assets should be enhanced. Any SACCO should manage its assets and liabilities to earn the highest benefit to its members. The SACCO management thus has to oversee four key mandates. Firstly, manager must ensure that the SACCO has adequate cash to pay its depositors when need arises. This happens when there is withdrawal by depositor and demand for payment and this requires managing liquidity, acquiring assets capable of meeting the SACCO's financial obligations. The managers should then pursue a reasonable level of risky investment by for example acquisition of assets with low default rates. Asset management can also be employed here. Thirdly, manager concerned should procure resources at low cost and lastly, the manager has to determine the assets the SACCO should retain and

then acquire the required resources. This is capital adequacy management (Mishkin & Eakins, 2012; Gitonga, 2014).

Effective and efficient management of SACCO needs a professional manager. A bad SACCO in the hands of good management can turn out to be a successful SACCO while a good SACCO in the hands of poor management can become a failure. Therefore, the management of a financial company is a very important factor which should be considered in SACCO analysis. In fact, this is the first factor to be considered when investors are giving out loans to SACCOs. If it turns out to be poor, further analysis can be done to reveal that the SACCO is not worth investing in (Lipton & Lorsh, 1992). Both in Kenya and across the world there are many examples of credit and saving cooperative societies which have flourished because of good management. There are also an equal number of examples of credit unions which have been doomed because of ineffective management. Good managers must select their portfolio wisely which as a result give good financial return to their members (Nagarajan & Jayabal, 2012).

According to Nagarajan and Jayabal (2012), professional managers and competent employees should be employed so that these organisations may prosper. However, bad managers will run down good companies. There is little knowledge or research which has been conducted on the challenges of capital adequacy framework and funds allocation of deposit- taking SACCOs. The financial performance depends on its operative management. This study attempted to conduct a research on the capital adequacy framework and funds allocation practices based on financial performance and challenges of deposit-taking SACCOs in Kenya.

The additional task of receiving cash from members is a challenge to deposit- taking SACCOs. They do not have capacity to handle this daunting task. The study established that capital adequacy framework is moderated by allocation of funds towards financial performance of DTS in Kenya. SACCOs should map their finances either internal or external finances with financial returns. Managerial capability should be improved to handle the complicated task of financial management (Lys, Naugthon & Wang, 2015).

1.2 Statement of the Problem

The Vision 2030 has laid-down programmes necessary for the achievement of the desired goal in the development blueprint. It recognizes SACCOs as crucial player in mobilising savings for investments in enterprises and individual development (Mira & Kennedy, 2013; Langat, 2012). But this dream cannot be achieved if any SACCO has inadequate capital framework, which is necessary for implementing its strategic plan. The relevant Ministry is tasked with developing the sector through frameworks which will facilitate the realisation of the national social-economic aspirations of Kenya (Ademba, 2012).

The cooperative philosophy guides societies. International Co-operative Alliance (ICA) framed seven principles which guide societies' operations. The introduction of SASRA is within the purview of government reform process in the financial sector and is established to protect members' interests and ensure public confidence in the SACCO (Gwegi & Karanja, 2014). It will ultimately promote growth by improving fund access, amalgamation of local savings and inexpensive facilities to SACCO members (Ademba, 2013). According to Financial Sector Deepening [FSD]

Kenya (2013), some SACCOs are experiencing liquidity problems, and most of these kinds seldom meet memberships' demands for credit and withdrawal of savings. Institutional capital cannot meet the demands of members. As such, it needs external financing, which is an expensive exercise. In this scenario, members are uncertain on the prospects of the SACCOs, despite their loyalty (Gwegi & Karanja (2014). This situation should be rectified to save the demise of SACCOs. Therefore, there is need to understand the effect of capital adequacy framework and funds-allocation strategy on performance.

SACCOs are faced with challenges key among them include insufficient capital framework, inadequate legislation, low uptake of international performance standards, absence of disclosure requirement principles, lack of development strategies, low of adoption of new technologies, improper human resource management and wanting resources structuring models. Unstable macro-economic setting and rigid capital adequacy prudential requirements have worsened the situation of societies (Ongore & Kusa, 2013). According to SACCOs Supervision Annual Report 2013, SASRA in partnership with Financial Sector Deepening (FSD) of Kenya conducted a study to establish core skill gaps within licensed SACCOs to identify the core capacity and skills gaps in the sector which require immediate attention and. came up with the following capacity areas which need immediate address, namely; governance, human resource management, management information system, management of risk and of credit,, marketing strategies and development of products(Maina, 2013; Magali,2013). These gaps should be managed efficiently and effectively for the benefit of its members.

Since the introduction of deposit-taking business activity, many societies were deregistered. Most of them were not complying with the laid down regulations. Declining trend of deposit taking SACCOs has been witnessed since its inception. In 2014, 215 deposit taking SACCOs were licensed. However, in 2016 164 deposit taking societies were still in operation. It shows that there is a problem which needs to be addressed immediately. The introduction of deposit-taking business was done without taking into account capital adequacy framework which is currently facing the societies in Kenya. The policy framework which needs a thorough review includes the following: internal and external financing, portfolio selection, credit management, risk management, managerial capability and funds allocation strategy. These factors are very crucial for running of SACCOs (Mbogo, 2016).

1.3 Purpose of the Study

This study intention was to discover new insights about capital adequacy framework moderated by funds allocation towards financial performance of deposit taking SACCOs in Kenya. The declining trend of deposit taking SACCOs in Kenya need immediate address (McFie, 2016). In 2014,215 deposit taking SACCOs were licensed by the Authority. Since then the societies are becoming less in number. In 2016, the authority licensed only 164.The outcome of the survey showed that internal financing was inadequate, over borrowing was an issue, portfolio selection was inappropriate, credit management was not appropriately, risk management was not in place and most of the managers were not professionally qualified. These led to misallocation of resources (SACCO Societies Regulatory Authority [SASRA], 2016).

1.4 Research Objectives of the Study

The study comprised of broad objective and specific objectives.

1.4.1 General Objective

The main objective was to establish influence of capital adequacy framework on financial performance of deposit taking SACCOs in Kenya.

1.4.2 Specific Objectives

The specific objectives were:

i. To examine the influence of internal financing on financial performance of deposit-taking SACCOS in Kenya.
ii. To determine the influence of external financing on financial performance of deposit-taking SACCOS in Kenya.
iii. To establish the influence of portfolio selection on financial performance of deposit-taking SACCOS in Kenya.
iv. To examine the influence of credit management on financial performance of deposit-taking SACCOS in Kenya.
v. To assess the influence of risk management on financial performance of deposit -taking SACCOS in Kenya.
vi. To evaluate the influence of managerial capability on financial performance of deposit-taking SACCOS in Kenya.
vii. To evaluate the moderating effect of funds allocation strategy and the capital adequacy framework towards financial performance of the deposit taking SACCOS in Kenya.

1.5 Research Hypotheses

In order to establish the achievement of the objectives the following hypotheses stated in the null form were tested in the study.

H_{O1}: Internal financing has no significant influence on financial performance of deposit taking SACCOS in Kenya.

H_{O2}: External financing has no significant influence on financial performance of deposit taking SACCOS in Kenya.

H_{O3}: Portfolio selection has no significant influence on financial performance of deposit taking SACCOS in Kenya.

H_{O4}: Credit management has no significant influence on financial performance of deposit taking SACCOS in Kenya.

H_{O5}: Risk management has no significant influence on financial performance of deposit taking SACCOS in Kenya.

H_{O6}: Managerial capability has no significant influence on financial performance of deposit taking SACCOS in Kenya.

H_{O7}: Funds allocation strategy has no moderating effect on capital adequacy framework towards financial performance of deposit taking SACCOS in Kenya.

1.6 Justification of the Study

Financial performance as a measure indicates the financial health of a firm. It is supported by various factors. These factors include financial as well as non-financial factors. Financial factors include external and internal finances. Non-financial factors include strategies and management capability.

According to Drury (2012), financial performance measures are intentions to motivate managers to pursue those goals that will best benefit the SACCO as a whole. Financial measures do not indicate all the factors that are crucial to the success of a SACCO. Non-financial measures should also be included in measuring performance of the societies. The crucial areas which need to be included are: competitiveness, product leadership, quality, customer care, innovation and flexibility. These measures influence demand for SACCO's products and services. The SACCO should develop performance measures that support the objectives and competitive strategies of the society (Margrabe, 2014). The study was conducted to establish the reasons behind declining of trend of deposit taking SACCOs in Kenya. The outcome will be addressed by the relevant authority. Solutions to the prevailing problem will facilitate improvement of societies in Kenya.

1.7 Limitations of the Study

Research study was faced by a number of challenges. First, the wide area covered was costly and time consuming. The researcher ensured that acceptable response rate was achieved. Second, some of the respondents were not cooperative in filling and returning the questionnaire. However, county cooperative officers ensured that all respondents returned questionnaire in time. This study focussed on capital adequacy framework and funds allocation strategy towards financial performance of deposit taking SACCOs in Kenya which are aspects of prudent financial management.

The study finding was limited to deposit taking SACCOs in Kenya. The result may not be generalised to cover non-deposit taking SACCOs in Kenya. The legal framework that guides deposit taking SACCOs is significantly different.

1.8 Delimitation of the Study

The study was narrowed to address the capital adequacy framework and funds - allocation strategy on performance of deposit taking SACCOs in Kenya. The conclusion of the study can be replicated beyond the population sampled.

1.9 Significance of the Study

With the introduction of Society Authority, the mandate to license and subsequently supervise deposit-taking SACCOs in Kenya was established. Development of suitable supervisory framework responsive to the nature and size of deposit-taking SACCOs was necessary. The Authority should ensure that societies are safe and sound including with regard to financial sustainability and policies for enhancing access to services while reducing capital adequacy framework challenges.

The study is expected to be of benefit to the management of deposit taking SACCOs, this way; the challenges on the capital adequacy framework for SACCO business performance in Kenya will be addressed. As a result, this study will provide a practical solution to the prevailing problems in the deposit-taking SACCOs in Kenya as the findings will be availing to each SACCO that participated in the survey. The results found certain knowledge gaps in the capital adequacy framework of DTS. These areas need re-evaluation so as to obtain sustainable business growth and performance.

The study endeavoured to give some insight to the government and the policy makers; especially in the areas of managerial competence, portfolio selection, risk management and work capital management. To avoid shifting the focus of the management on achieving the intended business performance targets, there is need to streamline the capital adequacy framework requirement. The major objective of

steering the SACCOs towards prosperity should not be neglected. The study formed a formidable base for informing practitioners and policy makers Borzaga and Galera (2012) in establishing reasons for the current transformation of DTS in Kenya. The study also extended past research by investigating the interrelationships of business components on performance of firms where the influence of combination of variables were examined rather than characteristics of single components as recommended by (Machiraju, 2016).

The study findings will enhance the achievement of financial inclusion in the financial system. The banking services will improve in the remote areas. Saving mobilisation will increase in the country. Hence, the exploitation of SACCOs full potential in national development as envisaged in the Kenya Vision 2030 will be achieved (Kinyuira, Gatenya & Muturi, 2014). It is also possible to attain Millennium Development Goals (2015), because providing financial services in the rural areas will reduce poverty. It will happen if the members save and take credit to improve their standard of living (Republic of Kenya (RoK], 1997).

To the academicians, the study has availed further contribution to the existing knowledge of capital adequacy framework and funds allocation strategy on financial performance of SACCOs in Kenya. It considered components for capital adequacy framework both monetary and non- monetary items which influenced financial return of DTS in Kenya. This will also stimulate prospective researchers to replicate the study in other sectors of the economy.

1.10 Assumptions of the Study

For the purpose of this study the following assumptions were made: first, capital adequacy framework plays a crucial role on establishing the performance of DTS in Kenya given that all other aspects remained unchanged. Second, funds are allocated prudently. Third, Sacco Society Regulatory Authority supervises and monitors SACCOs effectively. Finally, the respondents were honest in their responses to the items in questionnaires and that the information given had no reservations. To maintain capital adequacy framework and to allocate funds prudently, rules and regulations should be set so that SACCOs can manage their resources well. Minimum capital requirements should be embraced by all the societies. Funds allocation guidelines should be in place.

1.11 Scope of the Study

The study covered all counties in Kenya which are characterized by diverse economic activities including agriculture, livestock keeping and tourism. These resources are however not well utilised. Infrastructure within the counties is also poor and while SACCOs in some counties were agriculture-centred, product and service prices are unpredictable and affect the inflow of cash in such SACCOs. This has prompted the SACCOs to pursue inroads into other areas of membership such as recruiting motorbike (Boda-Boda) business operators together with small and medium enterprise owners with the view of improving liquidity through diversification.

The study involved a sample of 111 of the 164 licensed DTS in Kenya. The independent variables were internal financing, external financing, portfolio selection, credit management, risk management and managerial capability with

funds allocation strategy as a moderating variable and financial performance was dependent variable.

The study focused on establishing influence of capital adequacy framework on performance and specifically the influence of internal financing, external financing portfolio selection, credit management, risk management and managerial capability as capital adequacy framework influences performance of DTS. The funds allocation strategy was also assessed to evaluate whether it moderates the relationship between capital adequacy framework expectations and financial performance.

1.12 Operational Definition of Terms

Capital adequacy framework	Capital adequacy framework comprises strategies which will enable deposit-taking SACCOs to utilise their financial resources optimally (Jordan, Miller & Dolvin, 2018).
Deposit taking SACCO	SACCO licensed by SASRA to take deposit from its members (SACCO Societies Act, 2008)
External financing	External financing is a scenario where SACCO uses borrowed finances in implementing its projects (Brealey, Myers & Marcus, 2017).
Financial performance	Financial performance is financial health of a SACCO at a given period which is measured by PEARLS system (International Cooperative Alliance [ICA], 2004).
Fund allocation	Fund allocation is how financial resources are shared among various uses to which they might be put with expectation of higher financial gains (Hiriyappa, 2015).
Internal financing	Internal financing is a scenario where a SACCO uses its own finances to implement its projects (Hampton, 2013).

Managerial capability	Managerial capability is the ability of a SACCO to manage its resources effectively (Chandan, 2016).
Portfolio selection	Portfolio is a combination of investments which SACCO has to select them appropriately (Chandra, 2015).
Risk management	Risk management is minimising adverse outcomes by ensuring that strategies are in place to avoid such eventualities but not to eliminate risk (Bessis, 2012).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This segment outlines an overview of capital adequacy framework, funds allocation strategy and financial performance. A review of the study of prudent financial management practices relating to SACCOs. This chapter deals with the theories relating to the independent, moderating and dependent variables of the research. The section reviewed the literature related to the area of study and the knowledge gap. It included research studies carried out previously.

Current literatures that are important to management of credit cooperative societies' finances in Kenya and their synthesis have been analysed and synthesised. The literature in this chapter enabled the identification of research gaps that necessitated the study and areas of further research.

2.2 Theoretical Framework

The theoretical framework explains a given phenomenon. It gives a researcher a bird's view of a certain phenomenon. Capital asset is any asset such as equipment or lands that a company owns and uses in doing its business. Capital adequacy framework denotes financial as well as non-financial (Social) assets which enable a firm to achieve its goals. The firm's goals are to improve business performance. The financial capital comprises of shares, savings/deposits, institutional capital and debt capital, whereas non-financial (social) capital comprises human resource as well as strategies or policies which firm uses to utilise financial capital to achieve its

business performance. Non-financial (social) capital drives financial capital to attain good financial performance. Non-financial capital is a necessity to utilise scarce resources effectively and efficiently in a changing environment.

There are a few theories that attempt to elucidate the importance of capital adequacy framework of business firms. They are capital structure theory which includes: trade-off theory, pecking order theory, Agency theory and modern portfolio theory (Naituli, 2011).

2.2.1 Capital Structure Theory

Bhalla (2014) says even a casual review of the literature brings one quickly to the key question of whether the way in which investment proposals are financed matters and if it does matter, what is capital structure? Capital structure is the combination of debt and equity that attains the stated managerial goals, in this case, the maximisation of the SACCO's market values. In other words, the optimal capital structure is that combination of equity and debt that minimises the SACCO's capital cost. Hence, the existence of an optimal capital structure also implies the simultaneous optimisation of two important variables namely; cost of capital and market value (Brealey, Myers & Marcus, 2017).

However, the existence of an optimal capital structure, which leads to maximum market valuation and minimum capital cost, is not accepted unequivocally. As in many other controversial issues, there are two extreme views and the inevitable intermediate version. To wit on the one hand of the spectrum, there is the traditional view that argues consistently and convincingly that there exists optimal structure of capital defined by an array of values acceptable to the capital markets. On the other hand, there is the view of Modigliani and Miller (1958) who also argue consistently

and convincingly that under certain acceptable assumptions there can be no leverage effect on the market value of the firm; hence there is no optimal capital structure as such. Between these two extremes, there is the intermediate view of the net-operating –income approach that argues that changes in the capital structure do not change the overall risk content of the firm; rather, they redistribute the risk among the claim holders. Hence there is no leverage effect in this sense. However, there exists optimal structure of capital and its effects, which is derived from the tax treatment of debt and market imperfections (Jordan et al., 2018). These frictional elements can lead to higher market values and lower cost of capital for given levels of risk when the SACCO's management employs a judicious combination of financial claims. All three views are internally consistent, given that all factors are kept constant.

Bhalla (2014) assumes that entities can choose between a safe technology with a certain additional cost and uncertain cost of risky technology with an incentive to finance the latter with debt as the risky technology initially has greater expected profits and risk than the safe technology.

2.2.2 A Pecking Order Theory: Managerial Preference Effects

Bhalla (2014) and Myers (1984) posit that a particular target capital structure may not be in existence. Myers (1984) pecking order theory suggests that entities prefer internal financing. He further opined that managers adjust dividend pay-outs to arrest the need for external equity shares whilst circumventing major alterations in the amount of dividend. Where external finances are required, he submitted that the safest securities be issued first; debt tending to be the primary security issued and outside value the security of final resort (El-Dereny & Rashwan, 2014). The

inclination for inner funding is based on desire to dodge the debt and checking what happens when modern securities are sold freely. In addition, Myers argued that the pecking order of financing may reflect the relative issue costs for various security types. The pecking order theory explains in part why profitable entities tend to have low ratios of debt, because they have adequate cash flows to re-invest in new venture. In case of SACCOs, they should embrace more debt because they have a low stream of cash flow in their operations.

2.2.3 Modern Portfolio Theory

Harry Markowitz is considered the father of Modern Portfolio Theory (MPT) and introduced the principles that underpin the theory. These principles have been widely adopted by the financial community with the consequence of its very broad legacy today (French, 2013).

The MPT primarily influence management by providing a framework for the systematic selection of portfolios premised on expected return and risk principles.

Before introduction of MPT, investors handled loosely the notions of risk and return. Investors had the knowledge that it is strategic to diversify, and Markowitz is credited with formally developing the concept of portfolio diversification where he quantitatively computed why and how diversification of portfolio works to minimise the risk of a portfolio to an investor when individual risks are correlated**.** To achieve this, he sought to answer the question; is the risk of a given portfolio equal to the summation of the individual securities surrounding it? It stated that the interrelationships among security returns must be accounted for in order to compute portfolio risk and minimise portfolio risk to its minimum for any given level of return**.** In conclusion, SACCO should use Markowitz portfolio selection principle in

selecting portfolios. Portfolios with less risk and high return should be selected by the society (Chandra, 2015). From the findings, it showed that portfolio selection (9.7%) influence financial performance of deposit taking SACCOs in Kenya.

2.2.4 Agency Theory

Brigham and Houston (2011) opine that managers may have personal goals that may interfere with stockholders' maximisation of wealth and yet they are empowered by the shareholders of the entities; –the membership- to make decisions that may create a potential conflict of interest known as Agency Theory.

Pandey (2015) asserts that there is a crucial relationship between shareholders and managers which may create firm value. While managers should in theory act in the best interest of shareholders and promote value creation, in practice, managers may pursue their own personal goals. Managers may maximise their own wealth through high remunerations at the expense of the membership, or opt to play safe by creating acceptable wealth for membership but not the maximum (Chavez, 2015). They may opt for costly investment instead electing to finance risks otherwise needed to maximise shareholders wealth ultimately frustrating the objective of the shareholders wealth maximisation as a general intent of firm. It is still in the managers' interest that entities survive in the long run. Managers also value independence and freedom from external interference making their actions likely to be motivated by survival and self-sufficiency. Further, SACCOs are complex organisations consisting of multiple stakeholders.

Shareholders continuously monitor their society to prevent managers from benefitting from the society at the expense of the members. Employees, creditors, customers and government also keep an eye on managers' activities thereby

minimizing the likelihood of managers exclusively pursuing their own personal objectives (Brigham & Houston, 2011). Their survival is thus hinged on achievement of targets and their success is based on their management of the societies they lead in comparison with managers leading other societies even though the performance of each management will depend on the fulfilment of the specific objectives of the entity.

The conflict between shareholders' interests and those of management is known as agency problem and occasions agency costs which include adverse deviation of share value for the stockholders and costs they incur to monitor the managers and control their behaviour. The agency problem vanishes when managers own the society (Connelly, Certo, Ireland & Reutzel, 2013). Thus availing participative rights to these managers for example through stock options could mitigate this problem of agency (Gitman, 2011). Stockholders can compensate managers well by offering them incentives in order to advance the stockholders' interests. The agency problem can be minimised by close monitoring of managers by other stakeholders.

2.2.5 Risk Theory

Gallati (2013) defined risk as a situation where an exposure to adversity exists or one in which a possibility of deviation from an expected desired outcome exists. The society is no exception as it encounters a number of risks in its daily operation. The society's liquidity position is overseen to satisfy the request of contributors and borrowers' needs by converting resources into cash or borrowing reserves on demand with negligible misfortune. Liquidity administration is the method of creating stores to meet legally binding or relationship commitments at sensible costs at all times (Mudibo, 2014). The legally binding commitments that must be met

incorporate: modern credit request, existing advance commitments and funds withdrawals. Proper management of liquidity by societies serves five vital functions: first, it should demonstrate to the market that the society is safe and capable of repaying its borrowings. Second, enabling a society meet its loan commitments. Third, it enables the society to elude selling of unprofitable assets and selling them at a throw away price. However, the assets are at going concern value which generates funds. Finally, effective liquidity management lowers the size of the default risk premium the society must pay for funds (Bessis, 2012). This function focuses on the reasonable price aspects of the definition of liquidity management. A society with strong balance sheets will be perceived by the market place as being liquid and safe. Such societies will be able to buy funds at lower risk premiums reflecting their perceived credit worthiness (Kumar, Himes & Kritzer, 2014).

Management of risks has a competitive advantage and is often voluntarily assumed by societies and include; credit, interest rate, liquidity, operational and other risks. Credit risk occurs when a society cannot recover money from loans or investments, Interest rate risk ensues when the market value of an asset, loan or security falls when interest rates rise affecting the solvency of the society which becomes incapable of fulfilling its obligations owing to the decline in the value of the assets occasioned by increase in interest rate. Liquidity risk happens when the society is incapable of meeting depositors' demands and borrowers' needs (Olkar, 2013). Even though the current assets have been turned into cash, they are also used to borrow funds to meet financial dues with nominal loss. Finally, operational risk encompasses inability to control operating expenditures such as salaries. In a competitive environment, high operational expenses endanger the prospect to

survive. Other risks which societies should take into account when designing risk management strategy include political risk and technology advances (environmental risk) (Nagarajan & Jayabal, 2012).

According to Kairu (2015), credit management is the ability to manage clients' credit lines and limits and is essential for managing revenue and receivables. The society must have a better insight into performance capability, credit score history and changing payment patterns as this assessment will minimise exposure to bad debt and bankruptcies. The ability to tap into new markets and clientele is dependent on a society's capability timeously make astute credit decisions and set appropriate lines of credit.

Management of credit has been an accounting function for a long time. This function is now an independent entity. Its main function is to screen customers with only the creditworthy allowed to transact with reviews of business performance capability and understanding the customers' business model. It is the first step in certifying that the society does not end up selling to customers who ends up being delinquent. Credit management is thus a crucial management function as it impacts on cash flow and can indicate the difference between survival and insolvency in the private sector or between cost effective and wasteful administration in the public sector (Kairu, 2015).

Credit procedures should be updated every year because debtors are affected by the changing economic climate in the marketplace. This also happens to all investments. Organisations using marketers or accountants to do the errands of credit management must change. The business environments have changed so much today and the way they handled their credit matters yesterday is not the same today. A

professional in credit management is an essential requirement which firms should embrace. The areas which need more attention in credit management include: lending process, credit control, provisions and write-offs. Ralston and Wright (2003) developed two elements to high quality lending practice. Firstly, the credit union should obtain systematic identification of risk of each loan applicant. Secondly, they highlight the necessity for adjusting lending conditions so as to incorporate the high risk of a borrower.

One of the main functions of a SACCO is to see it that there is proper credit control. According to Bessis (2012), credit union should stress the inclusion of limit procedures designed to avert single losses that could endanger the institution. Dekker (2004) opines that the role of placing instalment periods and principal amounts that would complement the affordability of the borrower is to be performed by the lending officer. The credit control will however reduce business volume of financial institutions because short duration loan terms restrict the interest revenue generation. According to Dekker (2004), the longer the term of a facility the greater the risk which may be resultant of the changing environment or circumstances of the borrower.

Between 2003 and 2006, low interest rates and favourable economic conditions stimulated the demand for new homes. According to Madura (2012), the advertised values of homes expanded significantly. Numerous regulations used by financial specialists contributed to failure of contracts or mortgage-backed securities. Domestic builders reacted to the ideal lodging conditions by building more homes. This investment opening encourages more lenders to join other lenders in financing home building. Home prices continue rising and it resulted in reduction of down

payment from home buyers. The lenders assumed that, even if the home buyers defaulted on the loan, the home's value would serve as sufficient collateral. However, in 2006 the scenario changed for worse, some prospective buyers were unwilling to purchase homes. The demand for new homes was less than the supply of new and existing homes for sale. As a result, housing prices declined. Increase in interest rate made the situation worst because most of the homeowners had adjustable–rate mortgages. This results in a situation where the mortgage payments were defaulted. Mortgage defaults continued rising and the market values of homes declined. As a result, the collateral backing the mortgage was not corresponding to the entire mortgage value. Though some of the mortgages were insured against default by private insurers the defaulted amount increased. Hence, some insurance companies which insured mortgages were not in a good financial position to cover their obligations.

The government of United States introduced Financial Reform Act to correct the mess in the financial system and purposes to ensure financial system stability. This mandate ensures that institutions granting mortgages must examine the income, job status, and credit history of mortgage applicants before approving mortgage applications so as to ensure that the looser standards that were common during credit crisis of 2008 do not recur. The Act also created Financial Stability Oversight Council whose mandate is to identify risks of the financial system and to make regulatory recommendations that could reduce those risks (Mwenda & Kalio, 2014).

2.2.6 Scientific Management Theory

This theory is attributed to Frederick Taylor whose experience exposed him to first-hand challenges and attitudes of workers. He conducted a survey to find out the

possibilities for management quality improvement in entities. Other contributors include Frank, Lilian Gilberth and Henry Gantt who suggested the effective use of human beings as adjuncts to machines in performance of routine tasks. Taylor was the only person who contributed concrete shape to the theory of scientific management which employs scientific methods to the problems of management. Scientific management is the art of knowing exactly what you want to do. The task should be done in the best and the cheapest way so that the outcome is maximised (Morris, Shirokora & Shatalor, 2013). The scientific task should be set basing it on time and motion study. Other bases on scientific management include standardisation of working conditions, scientific selection and training of workers (Spiegel & Yamori, 2014).

Administrative management is also relevant to SACCO management practices. It emphasizes the use of functional or process approach in managing organisations. Henry Fayol (1841-1925) introduced this kind of management and believed in universal management reasoning that those possessing general knowledge of managerial functions and principles are capable of managing all types of organisations. He thus proposed breaking of the complex management processes into distinct inter-dependent responsibility areas. These areas include technical, commercial, financial, security, accounting and managerial (Chandan, 2016).

The manager's chief function in business organisation is decision making and forward arrangement beneath dubious commerce conditions. A few of the vital administration choices include decisions on production, inventory, cost, marketing, finances, personnel and miscellaneous decisions (Mugwe, 2012). One of the trademarks of a great official is capacity to require speedy choice with clarity of

objectives, utilisation of available data, weighing advantages and disadvantages and making quick choices all taken to attain certain targets with objectives the propelling components in taking choice. It is imperative to keep in mind that other factors such as human and behavioural considerations, technological forces and environmental factors influence the choices and decisions made by managers (Chandan, 2016).

2.3 Empirical Review of Literature

Research was conducted by Wong, Fong, Wong & Choi (2015) on 38 commercial banks in Hong Kong. The study was on the factors determining bank performance and how their profit and pricing behaviour is affected by the structure of the market. The method focused on the Structure-Conduct-Performance (SCP) hypothesis and Efficient-Structure (EFS) were tested widely and established that the major determinants of the performance of banks in Hong Kong are the cost efficiency. However, the market structure is not a significant contributing factor in the bank's profitability. Larger banks are found to be more cost efficient than their counterparts. The bank-specific factors considered were cost and scale efficiency and the risk attitude. Macroeconomics factors are important determinants of banks profitability. They are real GDP growth and unemployment. The independent variables examined under bank performance were; cost efficiency, scale efficiency and the risk attitude of banks. Macroeconomics factors were moderating variables.

Research was conducted by Mosongo (2013) to establish whether the financial innovation has any effect on financial results among SACCOs in Nairobi County. The target population was 41 SACCOs registered under the commissioner for cooperatives in Nairobi County. The T-test, F-test and ANOVA were used to

determine whether there is a significant relationship between financial innovation and financial performance among the Societies in Nairobi County. The study found out that financial innovation leads to financial performance. Financial innovation is an independent variable which comprises process, product and institutional innovation. The performance is the dependent variable. From the finding, it established that institutional innovation had greatest impact on financial outcome followed by product innovation and lastly was process innovation. The researcher will not take financial innovation as the independent variable.

Research was conducted by Chumo (2013) on the effects of regulatory compliance on the financial performance of deposit-taking societies in South Rift region where a population of 28 DTS were sampled. From the findings, it concludes that the relationship between financial performance and regulatory provision had a causal effect. However, exclusively their personal goals are reduced.

Gweyi and Karanja (2014) researched on determinants of financial leverage of SACCOs in Kenya. Their finding indicated that there is a relationship between the independent variables, firm size, growth rate, liquidity and profitability and dependent variable financial leverage. Mpiira et.al (2013) analysed factors influencing participation of households in SACCO activities in Uganda. They found out that members' participation increased with growth in incomes, earnings, rent and salaried spouses were less likely to take part. Surge in the distance from the household to SACCO also reduced participation. Kivuvo and Olweny (2014) analysed the financial performance of Kenya's SACCOs employing Altman Z score model to determine corporate bankruptcy. They found out that management face

challenges in increasing returns. As the external financing increase, the chances of bankruptcy increase.

Nimalathasan (2015) conducted research on the capital structure and its impact on profitability and found out that debt-equity ratio is positively related to all profitability ratios. Based on the literature reviews, nobody has conducted research on capital adequacy framework and funds allocation on financial performance of deposit taking SACCOs. As a result, this study sought to establish the effects of independent and moderating variables on financial performance

2.4 Conceptual Framework

The framework depicted the relationship between the independent variable and dependent variable and their relationship with moderating variable which was funds allocation strategy. It guided the study to develop research objectives and also to conceptualise what could be possible ways of achieving the goals. The framework provided insight of the task which aided in examination of the effect of capital adequacy framework and financial performance with the moderating effect of funds allocation strategy. The figure 2.1 depicts the relationships capital adequacy framework and financial performance moderated by funds allocation strategy.

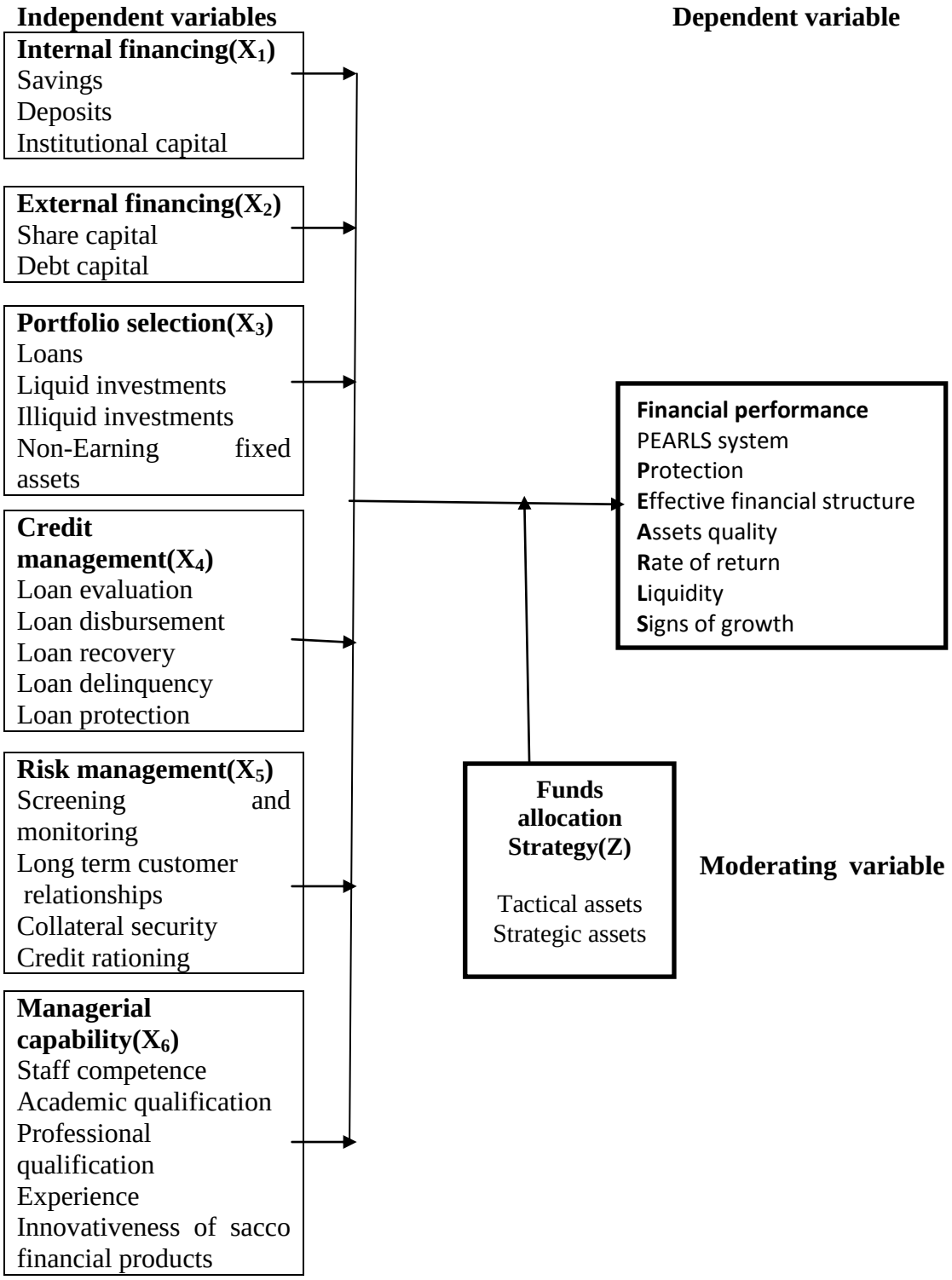

Figure.2.1: Conceptual Framework

Theories underpinning independent variables of this study are capital structure theory, pecking order theory, modern portfolio theory, agency theory and risk theory. Capital structure and pecking order theories explain capital structure and credit management of a firm. The capital structure theory states whether financing of investment proposals matters and if it does what is an optimal capital structure (Bhalla, 2014). Besides capital structure theory, pecking order theory also guides financing decision making (Chandra, 2015). The latter gives an order of financing investment proposals as follows; internal, debt and external finance. Modern portfolio theory informs the portfolio selection strategy which states that it should take into account the risks associated with investments. The managerial capability anchors agency theory which says that management should act in the best interest of members and the members' wealth maximisation. However, sometimes they may pursue their own goals (Pandey, 2015). Risk theory informs the risk management which shows that the business of financial institutions is making loans (Mishkin & Eakins, 2012). The institutions should lend secure loans. The repayment is effected in full to earn high profits. The size and age of SACCOs are control variables. These variables will minimise the effects of other independent variables which are unrelated with the purpose of this study.

This section reviewed the financial management practices of an economy entity which started changing in a revolutionary manner in mid 1950s with modern approaches answering those questions traditional approaches could not offer solutions. Financial management is a crucial function whose nature and scope is broader, covering both funds acquisition and its judicious apportionment. Funds allocation is done in a systematic way but not just haphazard process. When funds

are utilised and allocated judiciously among different investment opportunities help maximise members' wealth. Financial management is currently stressing effective and judicious utilisation of funds rather than funds raising using analysis in solving the financial challenges of the entity (Pandey, 2015).

At the heart of investment policy is the utility of funds which contributes to the achievement of the general financial objectives entities set for themselves (Chandra, 2015). Currently, the finance managers have to analyse the consequences of each decision to be undertaken by the entity. They are consulted before reaching any financial decision both at review and during scrutiny of the final outcome. Hence, their participation is vital and it is continuous the decision-making process cycle. SACCOs embrace the judicious utilisation of funds to exploit the available opportunities in the market to maximise members benefit. The techniques used include but not limited to.

2.4.1 Capital Structure and Financial Performance.

The structure of Capital of SACCOs consists of shares/deposits, institutional capital and debt capital. Institutional capital is non-withdrawable capital. Credit cooperative societies should see to it that they build institutional capital in the long-run. As a result, external financing will decline. This will translate into higher benefits to the members.

Capital structure refers to the relationship between debt and equity that constitute the mode of financing firm's assets. According to Gopal (2012), the choice of an appropriate capital structure is dependent on various factors including nature of business, regular earnings the business can maintain, conditions of market and finally attitude of investors at the time of fund raising. According to Pandey (2015),

capital structure decisions can affect a firm's value. Firm should have capital structure which can maximise its market value. This makes capital structure decision a complex area because of its relationship with other financial decision factors. Inappropriate capital structure decision is expensive, hence lowering the NPVs of projects making more of them unviable. However, effective capital structure decisions could lower capital costs and thereby trigger higher NPVs and more acceptable projects and hence increase in the firm's value (Gitman, 2011). Capital structure decision makings are guided by various theories namely, capital structure theory, trade-off theory, signalling theory and pecking order theory.

Most of the SACCOs borrow from financial institutions preferably Cooperative Bank of Kenya to finance their income generating projects at 15% rate of interest per annum. Efficient management of debt financing would undoubtedly contribute in creating wealth for the members which is major an objective for SACCOs. Bellouna (2012) opined that one way to ensure creation of value creation was to develop efficient working capital management as this is key for short-term corporate solvency and survival as it affords firms the avenue to utilise the hidden cash and to limit the requirement for working capital. Nwankwo and Osha (2014) state that efficient working capital management influences sale, profitability, growth and continuity in business.

Capital structure policy should guide them on the optimal capital structure so that they can strike a balance between risk and return. Consequently, member's wealth creation will be maximised. It is risky to use more debt because it will raise the risk which members have to pay. Debt is an obligation which has to be honoured in case the financed project failed yet more debt normally leads to higher projected rate of

return on equity in case the debt is managed efficiently and effectively by SACCO management.

Capital structure decisions are influenced by four main factors namely; risk of business, tax position, fiscal flexibility and managerial approach. Business risk is also referred to as operating risk (Murkomen, Njeje & Cherono, 2017). It is concerned with earnings before interest and tax. It arises due to the chances of variability in returns caused by different usage of funds. Every business establishment mobilises funds and uses funds for its business operations. The pattern of usage differs from one society to another. According to Nagarajan and Jayaball (2012), a company is exposed to business risk purely based on the pattern of usage of funds. Operating profit is sensitive to the pattern of usage of funds. Utilisation of funds also affects the operating cost of a firm. Operating costs include: fixed costs and variable costs.

A firm should not use a larger proportion of fixed cost because it is not advantageous. Fixed costs do vary with the volume of output. Financial risk is the relationship between the proportions of debt capital to the total capital of a SACCO. Debt capital is interest bearing. Hence, regardless of the prospects of the business, interest on debt capital must be paid. Payment of interest is an obligation; it does not depend on the volume of business transacted in a given period (Naituli, 2011). The major reason why many firms use debt capital in their business activities is because of its tax deductibles that lower the debt costs. Business flexibility connotes ability to raise capital on reasonable terms under unfavourable conditions (Mwisho, 2013). Financial managers acknowledge stable capital supply as necessary for steady operations which is crucial for long-run success. Some financial managers are

aggressive than others; thus some entities are more prone to utilise debt in order to boost profits and while this does not affect the true optional structure of capital, it nevertheless influences managers in determining optimal capital structure.

2.4.2 Credit Management and Financial Performance

The term credit comes from Latin word credere which means trust, faith and belief. If the buyer is given time to pay for goods supplied or services rendered, then it means that the seller has trust, faith and belief in the buyer that the money will actually be paid at a future date. This relates to the confidence of the seller in the buyer using the time given to get together the monies required to pay. If there is no trust, faith and belief, then the credit is not given (Kairu, 2015).

Basu and Rolfes (1995) postulated top-quality management of credit procedures as vital components on which successful businesses are built. The main objective for managing account receivable is collection of these accounts promptly without losing sales from high-pressure of collection practices.

To achieve this goal, SACCOs should adopt three methods of credit evaluation; namely, selection of credit and standards, credit terms and credit monitoring. Credit selection encompasses applying methods to determine which customers qualify for credit. According to Gitman (2011), this process should involve assessing the client's credit worthiness in comparison with the credit standards of the firm. The five C's of credit dimensions of character, capital, capacity, collateral and conditions can provide a framework to evaluate the creditworthiness of a potential creditor. However, this analysis may not give a specific accept or reject decision straight away. It needs an experienced analyst who has good judgment in review and grant of

credit requests. This framework tends to ensure that the credit customers will repay the facility advanced timeously within the terms of credit.

Credit terms outline the obligations of the parties upon credit and are strongly influenced by the business activities of an entity (Muasya, 2016). A SACCO needs its normal terms of credit to comply with its industry benchmarks. Where its terms are restrictive compared to its competitors, the entity loses trade whereas if the terms are less prohibitive compared to those of its competitors, the entity will likely pull in poor-quality clients who may not pay beneath the standard industry terms. Firms should thus compete on the basis of quality, price and product costs, and services, but not on the basis of its terms of credit. In addition, regular credit terms should be in line with industry standards but individual client terms should reflect the riskiness of the customer (Gitman, 2011).

SACCOs also ought to consider credit observing. Credit checking is a progressing audit of account receivable to decide whether clients are paying as per agreed to credit terms. On the off chance that they do not pay in an opportune way, credit observing will alarm the society to the issue. Moderate instalments are exorbitant to an entity since they protract the normal period of collection and hence increment in the entity's investment in accounts receivable (Kairu, 2015; Mudiri, 2013). The two methods commonly used for credit monitoring are aging of accounts receivable and average collection period and. SACCOs should have a good collection program which aims at timely collection of receivables. The collection efforts should include the following techniques, namely; monitoring the status of receivables, dispatching letters to clients with approaching due dates, e-mail and telephone reach out to clients around the due date, threat of legal action and actual action to and against

overdue accounts. Vigorous programmes of collection tend to decrease sales, shorten the average periods of collection, reduce percentage of bad debts and increase the cost of collection. However, a slack programme of collection pushes sales up, elongate the period of collection, increase percentage of bad debt and reduces the cost of collection.

The lending of funds by banking institutions and their willingness to lend affect the financial policies within an economy and even where the Central bank for example increases capital requirement during a weak economy, banks may still be unwilling to lend loans to some potential investors; this results in a credit crunch (Madura, 2012) since if the newly created funds are not lent out the economy will be unstimulated. The institutions would be unwilling to lend because they fear the weak economy will make it less likely that facilities will be repaid and only extend credit upon confirmation that the borrower's future cash flows will be sufficient to service the loan. During recession, the future cash flows of many prospective investors are indeterminate triggering reduced loan applications and also the number of loan applicants that meet a bank's qualification standards.

SACCOs and other institutions of lending owe a duty to their depositors, shareholders and regulators to avoid bad debts. Because default risk rises during a weak economy, some potential borrowers will be unable to obtain loans (Ondieki, 2015). Others may qualify only if they pay high risk premiums to cover their default risk. Consequently, the effects of the Central Bank's monetary policy may be limited if potential borrowers do not qualify or unwilling to incur the high risk premiums.

2.4.3 Risk Management and Financial Performance

This study focused on effective financial management of DTS in Kenya covering various counties in Kenya which SACCOs were introduced to promote saving among membership. While the intention was judicious, various critical factors other than minimum capital requirements were not considered. These included protection of the funds and managerial capabilities (Wetsi, 2015). The management of risk in DTS must be prioritised particularly during allocation of funds across different portfolios as fund allocation significantly influence business performance.

As depository institutions, SACCOs encounter credit, liquidity and interest rate risks. Political interference in running SACCO offices is a major problem in some counties. It has resulted in the withdrawal of deposit taking licenses by the Authority. The society may experience the risk of liquidity. In such a case there will be an unanticipated wave of withdrawals without any new deposits being made by members. In that case, SACCOs resort to borrowing from Cooperative Bank of Kenya to resolve temporary liquidity problems. However, if the cash crunch continues, society must search for a more permanent cure. The market restricts its transaction to consumers meeting as membership criteria. SACCOs possess little capacity to get supplementary deposits speedily. However, other financial institutions are capable of boosting their deposit levels due to their wider market reach (Gitman, 2011).

SACCOs mainly focus on personal loans to their membership. It is because credit risk exposure is not greater than mortgage credits. With most of the personal facilities secured, the loss to the SACCOs in the event of default is reduced. Distinct economic conditions impact on loan differently with poor conditions significantly

impacting loan defaults hence certain societies will, on account of favourable conditions, perform better than others within the same region (McKillop & Wilson, 2015). Nonetheless, societies with lenient debt policies could experience losses, even if there is a favourable business cycle. Credit analysis of loan applicants should be done thoroughly, even though the loans are consumers oriented.

Facilities by societies to their membership are characterized by short or intermediate maturities making their asset-portfolios interest-rate sensitive. The interest expenses influence the interest revenues earned by SACCOs. It is due to the nature of sources of funds which is rate-sensitive. Regardless of the interest rates changes the spread between interest incomes and interest outlays remain stable over time, regardless of changes in the rates of interest and thus SACCOs tend to experience lower exposure to interest rate risk than commercial banks (McGrath, 2017).

The objective of management of risk is to weed out any uneconomical risk taking while ensuring maximisation of value. The primary focus should thus not be minimisation or avoidance of all risks but finding the optimal gain between risks taken and expected returns, and creating competitive advantage for the entity (Michelle, 2016).

As each business venture comprises risk and return (Nagarajan & Jayabal, 2012), risk encompassing exposure to uncertainty, the result impacts business performance of a firm. Investors devote their funds expecting steady income in the future. Often, expected ROI contrasts the actual return (AR) realised and where AR realised equals the expected return, then the investment is considered to be risk-free. Where there is a wide variance in return, the investment is considered risky.

The SACCO Societies (Deposit taking SACCO business) Regulation, 2010, societies must appraise their credit portfolio at least once quarterly. DTS must make sure that granting loans and lending follow stipulated credit policies. Problematic accounts should be identified and categorised and prompt redress measures invoked with provisioning for potential losses continuous and efficient to match prevailing circumstances. There are five classes of loans: performing, watch, substandard, doubtful and loss loans. A deposit guarantee fund was introduced by statute to recompense the membership of failed SACCOs although it is yet to be operationalized.

A SACCO's risk attitude is dependent on its investment decisions and expected returns. The general presumption is that high risk ventures yield high returns. Decisions taken by SACCOs thus reflect their risk approach or inclinations which vary from SACCO to SACCO with DTS undertaking risky ventures expecting rewards (Jhingan & Stephen, 2011).

Investors have sufficient acquaintance with demand for product demand, production and factor costs and other related variables with risk a normal feature. Undertakings characterized by high degrees of uncertainty may thus be rejected even where their rates of return supersede minimum rates. It is also commonplace to find ventures requiring high cash outlays being accepted albeit having low rate of returns (Jones, 2014).

SACCOs practicing risks management have a competitive advantage as they are able to predict adversative changes and shield themselves. Societies have to manage all the risks in order to maximise members' wealth. Common risks which may be encountered in lending business are credit, interest rate, liquidity and operational

risks. With good professional managers, most of the risks will be mitigated. Credit risk arises when money from loans or investments failed to earn any financial gain. Interest rate risk occurs when market value of assets fall due to a rise in interest rate (Chanda, 2016). The solvency of the SACCO would be threatened when it cannot meet its financial obligations. Liquidity risk arises when the society cannot meet the demand of depositors and needs of borrowers. The society sells assets in order to get cash or borrows funds when needed with minimal loss. Finally, operational risk is resultant of inability to control operating expenses, especially non-interest expenses such as salaries and wages. Technological advancement which results in environmental risks should be taken into account when designing risk management strategies.

Todaro and Smith (2011) define debt servicing as paying back the principal facility and the interest accumulated constituting a contractual fixed charge on real incomes and savings SACCO. As the size of the debt grows, so do the debt servicing charges increase and these should be offset only through the earnings of the SACCO. Sometimes loans are rescheduled to allow reorganisation of the repayment terms. However, significant rises in interest rates could increase debt service payments and occasion servicing challenges.

2.4.4 Portfolio Selection and Financial Performance

Portfolio comprises combinations of securities held by an investor. Generally, investors invest in more than one security. The main objective of diversifying investment is to minimise risk in case it occurs. SACCOs invest in various ventures depending on their profitability of the ventures. They may invest in real estate, education sector, health sector, hospitality sector, transport sector or any other sector

of their choice (Omisore Munirat & Nwufo, 2013). They also invest in various securities. These securities are contained in typical portfolios consisting of shares of distinct risk-return relationships and bonds of different characteristics (Chandra, 2015). Marketable securities, for instance, government treasury bills and bonds are purchased by firms to maximise wealth creation of their members. These are income generating ventures which will improve their streams of cash inflows to their societies. They spread risk by investing in different securities so that the adverse outcome is minimised.

A critical requirement of investment is the need to take into consideration individual investments as part of an overall investment plan. Individual investment securities form a portfolio. It is advisable for an institution to diversify its investment as opposed to investing in single securities. Importantly, each security must be viewed in a portfolio context. The total risk of a portfolio has to be identified and quantified. In portfolio management, it has to establish an investment goal and then decide the best approach to reach that goal with the securities available. Investors should attempt to obtain the maximum return with minimum risk. According to Bhalla (2014), he stresses that in order to do a proper task of portfolio management, the investor must be aware of the investment prices. Portfolio management process involves the following investment decisions: plan, implement and monitor the outcomes.

In the planning stage, a thorough review should be carried out to ascertain investor's business situation and current capital market conditions. Both investor and market condition facilitate preparation of a set of investment policies which will guide the firm in implementing its investment plan. The set of policies are

documented in a written statement of investment policy (Ogilo, 2014). The items included in the investment policies are: the portfolio objectives, strategies and various other investment limitations. The result of a well-designed planning document will serve as a well-defined strategic asset allocation. The strategic asset allocation reflects the optimal combination of various asset classes in an efficient market. It is a significant portfolio which would actually be held if a passive, pure investment strategy is to be embraced (Jordan et al., 2018).

The investors' knowledge of various securities has a vital effect on the kind of security classes which should be held and the speculative strategy is embraced. The investor should know the rate of returns of a given security so that it can facilitate prudent decision making. If the investor does not have adequate information about the nature and extent of a security's short and long-term risk, then it should not be held. The tolerance level which the investor has for investment risk should be taken into account. According to Bhalla (2014), he states that developing a proper investment strategy is a daunting task. It is important to assess the potential future returns on various marketable securities before making any investment decision. The expected returns from short-term and long- term market forecasts must be made if one has any intent of engaging in tactical asset allocation. Strategic allocation of assets shows the allocations optimal for investors where all security prices trade at their long-term equilibrium values. This may happen if the markets are efficiently priced. Making decision on the investor's current strategic asset allocation requires prediction of future return distributions for various security class estimates of the major economic risks faced by the investor.

Investment strategies are dynamic. They change with time, as the wealth of the investor wealth changes and as security prices change and investor's knowhow increases. The optimal strategic asset allocation is not static, it changes as time passes. As a result, it requires periodic rebalancing from time to time. These changes are considered as passive changes to the portfolio. They are not active changes in the hopes of earnings excess risk-adjusted returns from potential security price disequilibrium. Investors should be continuously revising their strategic asset allocation. In this case, there is no need to plan for a passive rebalancing strategy. The investors should evaluate their individual investment needs and market expectations to develop a current strategic asset allocation (Bhalla, 2014).

The implementation of asset allocation involves three decisions. . Where percentage holdings of asset classes are different from the desired holdings as stated in the statement of investment policy, then the portfolio should be readjusted to the desired strategic asset allocation. One begins by adjusting the asset mix to the desired mix called for in the strategic asset allocation, then after that any tactical asset allocation and security selection decisions are made.

The last stage of investment process is portfolio monitoring. At this stage, portfolio returns are monitored in order to determine which speculative decisions are adding value to the portfolio and to ascertain that the portfolio's objectives are being met and have not changed. Constraints should be addressed so that the goals of the firm are achieved. Monitoring has three features. They include the following. First, the actual portfolio held should be examined to ascertain that it complies with the statement of investment policy. It is also important to determine whether any passive rebalancing of the asset mix is required. Second, investment performance should be

reviewed. The review consists of checking returns on aggregate portfolio, each asset class and investment manager. The returns from any speculative investment are also ascertained to see to it that investments are safe. Investment managers should have a wide knowledge on portfolio management (Bhalla, 2014; Chandra 2015).

When selecting portfolio, they should consider the portfolio decision basing it on objectives, constraints and preferences which consist of two steps, that is, asset allocation and security selection. According to Jones (2014), individual investors must confront the asset allocation issue if they are to be successful over time. Having a diversified portfolio of stocks is often not enough, it should be well managed. Good investment performance is having a portfolio of stocks and properly diversified because we live in an uncertain world and proper diversification does eliminate some of the risk of owning stocks. They should embrace Markowitz diversification model because it pays; that is, portfolio risk can be reduced depending on the co-variance relationships (Jones, 2014).

Portfolios are selected using fundamental portfolio analysis while technical analysis or a combination of the two may also be employed. Most investors often believe that the two techniques assist in valuing portfolios. It is evident from literature reviewed, that they possess the patience, skill, and ability to identify undervalued stocks. However, most of the SACCOs do not have security analysts who have analytical skill to assist them in identifying undervalued or overvalued stocks in the security markets.

2.4.5 Managerial Capability and Financial Performance

SACCOs are required to have satisfactory financial controls to guarantee that the judgment of their operation forms. The inside controls ought to be a necessarily

portion of the institution in general framework of internal control. They should promote transference and accountability in the operations of the enterprise. The reliability of financial and regulatory reporting is a priority. All the entities should be compliance with relevant laws, regulations and institutional policies (Kumar et al., 2014). An effective system of internal control for operations and management include the following: a great control environment, a satisfactory preparation for distinguishing and assessing hazard, the foundation of control exercises such as arrangements, methods and strategies, palatable data frameworks and persistent audit of adherence to set up arrangements and methods. Operational oversight by the society board and senior management is vital for prudent financial management process hence crucial for them to understand their mandate about financial management. They perform their roles in overseeing and managing society finances adequately.

The management skills of SACCOs should be improved so that the expected cash flows will be enhanced. For example, competent managers will recognise how to revise the composition of the firm assets and liabilities to capitalise on existing economic or regulatory conditions. They can capitalise on economies of scale by expanding specific types of businesses and avail diversified services that cater for a range of customers. They may restructure operations and utilise technologies to reduce outlays (Madura, 2012). The SASRA should prescribe a capital adequacy framework to provide for managerial efficiency and effectiveness. Professional managers would be in a good position to manage societies' financial and non-financial resources for prosperity and posterity

Today, human resource professionals should perform the role of a partner who helps the organisations implement their business strategy positioning the function as integral in business strategy as an effective HR management enables a firm compete globally, grab market share and become innovative (Dubrin, 2009). In today's competitive and globalised market environment, a skilful committed and competent workforce is a great source of competitive advantage. Dedicated workforce allows the organisations to compete on the basis of market responsiveness, product and service quality and technical innovation. Low cost, high quality products and services are not just the result of sophisticated machines, but the result of intensely committed employees who work hard and with self-discipline to produce such products at the lowest possible cost.

Human Resource Management (HRM) is an equal partner in both the formulation and implementation of the company's strategies so as to gain a competitive advantage (Gupta, 2008). The goals and strategy should be defined in clear terms so that people can understand their role in realising the goals and the success in achieving them can be measured. Once the strategy is clarified, the HR professionals need to build a clear case for why and how HR can support that strategy. SACCOs have control regarding composition of its management and organisational structure. Through the managers in-house decisions that capitalise on the external forces can be made. The external factors include: rates of interest, economic growth and regulatory bottlenecks over which a firm has no control. As a result, the managers' skills within a society can impact its expected financial performance. Specially, skilful management is needed for the creation of new products and services that

complement the existing services they offer to members. Skilled managers could also create products that will be used by SACCOs.

Cooperatives are republic and democratic institutions. The owners (members) elect directors to represent them and oversee the business affairs of the firm. Through the board of directors (BOD) the overall supervision of an entity is performed. A Chief Executive Officer (CEO) oversees actual operation. Both CEO and BOD are collectively and individually answerable to the members. In addition to choosing the Chief Executive Officer, the BOD also advises on and approves business ventures and strategy; corporate governance. Corporate governance connotes the process, custom, policy, law and institutions that determine how a firm is run. According to Kairu (2015), the business activities of an entity are managed under the direction of a BOD who delegate to the Chief Executive Officer and other members of staff. The directors should steer the enterprise with integrity and commitment to the entity, its business plans and long-term members' value. The directors have a wealth of experience to steer the society to prosperity (Okewo, 2013).

In Kenya, cooperatives are governed by the co-operative societies Act, rules and by-law set out by the statutory regulations which direct the operations of cooperative society. According to Kobia (2011), the problem with cooperative corporate governance arises from weakness in the election or selection of board and management committees. This compromises their contribution and independent judgment on issues of vision, strategy, application of resources, and appointment of executives, standards of conduct and management performance. The most common strategy which affects cash flows in any given SACCO is the management abilities to control daily operations of the society. The society cannot dictate economic

growth, interest rate movements, or regulation, but it can select its good management team and organisational structure through whom decisions leveraging on external factors such as economic growth, interest rate and regulation can be exploited for the benefit of the firm. As the managers' skills improve, so is the expected cash flows.

Managerial capability of any firm is anchored on education and qualification. The educational background and formal qualifications of managers and Board of directors should be a guiding principle. According to Bosworth and Wilson (2002), qualifications are measure of capability. It should be a requirement when recruiting managers. Managers should have business administration related degrees and CPA (K). The academic qualification will give them first hand weapon to promote organisation effectiveness. Organisational effectiveness depends upon individual effectiveness, group effectiveness and other factors related to organisation (Rudani, 2011). The development of any organisation needs professionally qualified managers. Behind the success story of any firm, group efforts have potential contribution. For deposit taking SACCOs to be successful, they must recruit professional managers. It is also crucial that Board of Directors should be degree holders so that they can direct the organisation to prosperity.

Formal and informal training is a continuous process in all organisations. It facilitates the achievement of the organisational goals. Every firm has to ensure that their staff complements are professionally sound and technically expert. They should be well equipped to handle any business activity. A firm has sole responsibility to arrange training session of all the employees every year so that the quality of human skills is maintained. To ensure professional excellence, it should be mandatory to

update employee skill every year. It is also prudent to embrace management of global environment (Kondalkar, 2014). Most deposit taking SACCOs have problem in developing their staff. Staff is the engine of the organisation. They require to be updated every now and then. The training will modify individual behaviour and implement change of a permanent nature. Any intervention to solve prevailing problem, it needs to diagnose the cause. It is critical to select appropriate intervention and implement it till desired outcomes are realised. It could be repetitive in nature. Its objective is to understand human behaviour and modify various organisational processes for desired results. All the SACCOs should embrace employee development so that their societies can be run professionally. Hence, members can benefit from their societies financially.

The government of Kenya should lay a legal framework to facilitate recruitment of professional managers in all the SACCOs. This will go a long way in managing and investing members' funds judiciously. Bad managers ruin good firms. Good managers manage funds professionally. Even though the government has passed laws which guide SACCOs, most of them have failed. The societies are being mismanaged by management. Board of directors influences them to invest in unviable projects. Some political leaders are involved in mismanagement of members' funds. According to Kanchu and Kumar (2013), they state that in order to manage SACCOs successfully a manager should possess the following necessary qualities. First, a manager ought to be well-educated. Besides general education, a manager should have specialised in business administration. Knowledge of business environment is vital to deal with the problems which the society may have to face in future. Second, a manager should undergo training to develop necessary skills for

running the society. Managerial skills are acquired through training. It is mandatory for a good manager to have some sort of training in the area of management where he is working. Third, a manager should possess some higher level of intelligence than the average human beings and should be in a good position to think scientifically and analyse the problems precisely. Fourth, all the managers are supposed to provide guidance and leadership to a number of subordinates. The managers ought to channelise the energies of the subordinates for the achievement of SACCO objectives. Good leadership qualities can motivate subordinates effectively. Finally, managers should possess the following qualities: foresight, maturity, technical knowledge, human relations attitude and self-confidence. The most prominent issue is how directors oversee the work force. The director within the business environment has got to bargain productively with the individuals who are to contribute for the accomplishment of authoritative objectives. Drucker has pushed that the administrative approach to handle labourers and work ought to be practical and energetic. Each work ought to be outlined as a coordinated set of operations (Chanda,2016). The labourers ought to be given an adequate degree of opportunity to organise and control their work environment. It is the obligation of each supervisor to teach, prepare and create individuals underneath him so that they may utilise their possibilities and capacities to perform the work distributed to them. The chief officers ought to offer assistance to staff in the lower level. The staff have to be motivated to achieve the organisational goals. For getting best commitment from the individuals working beneath him, he must give them with legitimate environment. Directors ought to make a climate which brings in and keeps up fulfilment of SACCOs' objectives. Business and employee management is an art.

The business landscape today is characterized by entities that make billions one year and file bankruptcy in a day. Normally, the business arena is unpredictable. Entities face a multitude of challenges including technological advancement, diversity and globalization which give managers daunting task and necessitates knowledge management training (Olando, Mbewa & Jagongo, 2013). Today, resources and markets are available on a global scale, and technologies continue to offer solutions and challenges to present day SACCO business models. There are many challenges faced by SACCOs including environmental, organisational and individual challenges. Deposit-taking SACCOs that deal with these challenges effectively are likely to outperform those that do not face them effectively. Managers face dynamic environment which force them to be constantly monitoring the opportunities and threats. Managers need to be proactive in their business dealings.

Total quality management refers to the effective use of the available human resources. Hence SACCOs should stress on training and continuous personnel improvement to achieve their intended goals. Total quality management means that a SACCO's culture is explained by and supports the constant quest for customer satisfaction. According to Kondalkar (2014), it involves continuous improvement of SACCO's processes, resulting in high quality products and services. As Human resource is a crucial asset in any organisation, no research has been conducted to establish the relationship between managerial capabilities on financial performance.

2.4.6 Funds Allocation Strategy and Financial Performance

Funds management relates to planning the procurement of finances and using the resources judiciously. Its objective is to achieve the desired expectations of the societies and the providers of funds. It has three functions, namely; to anticipate

financial needs in different sections within long-term and the short-term investment in fixed and current assets; to acquire resources from various sources to meet the business requirements and to allocate funds to maximise members' wealth. Government regulates the operations of all financial institutions so that unscrupulous institutions could not exploit savers and borrowers. Without rules and regulations, the financial sector will be a disaster. The diagram below illustrates the interaction between sources and uses of funds which as a result influence financial performance of SACCOs.

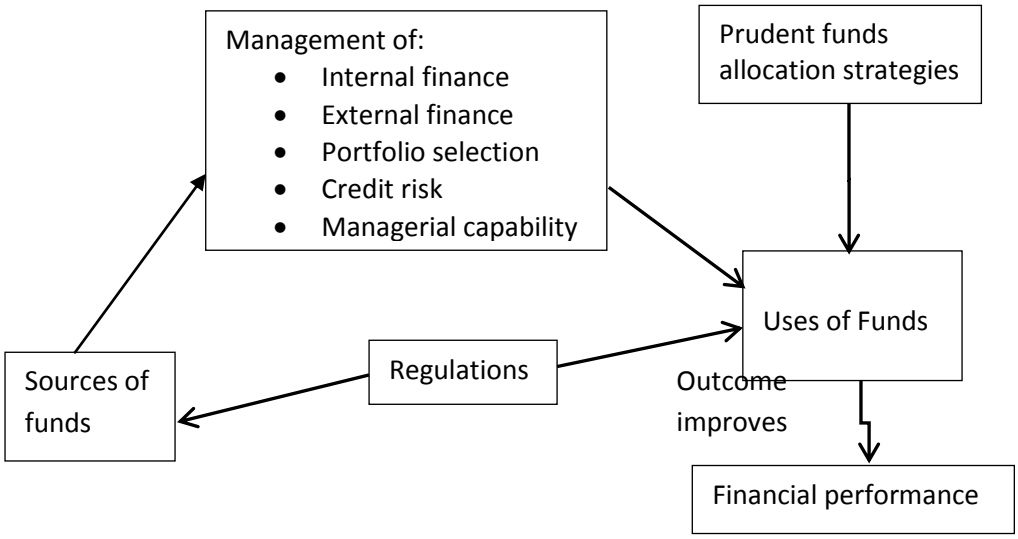

Figure.2.2: Funds management. Source: Author (2017)

Any SACCO finances its operations using a capital structure that can minimise its cost. By minimising the cost of capital used to fund a given level of activities, finance managers minimise the required cost necessary to make the SACCO feasible and therefore maximise the value of SACCO operations (Mburu, 2014). Society fund sources are classified into deposits, borrowed funds, institutional capital and

share capital. Most of the societies obtain their funds from members' deposits which is similar to any savings account deposit in commercial banks; it has no specified maturity. Licensed deposit taking SACCOs are allowed to receive deposits from their members. Deposit holders are paid interest at the end of the year. In cases where any society requires funds for either short–term or long-term period, it may borrow from other SACCOs or from commercial banks (Madura, 2012). Most of the SACCOs borrow from Cooperative Bank of Kenya which acts as a lender for all societies to accommodate funding and specific needs or to buoy the liquidity of distressed enterprises

A SACCO can retain a portion of the profits it has earned without distributing any part of it to the members. Portions of profits held in the firm form institutional capital. It includes membership fees. It is non-withdrawable capital. The SACCO Societies Act 2008 encourages the enterprises to build up this kind of fund. Members contribute a certain amount of money monthly to the Sacco kitty, and this also forms share capital. When a member requires a loan, he is entitled to a figure equal to its shares, multiplied by either two or three to determine the amount of credit. He will receive such sum (Magness, 2016).

SACCOs invest their funds in either short-term or long-term venture. The uses of funds for Societies include; cash, mortgages, securities and consumer and commercial loans. Also, SACCOs must retain cash to meet reserve requirements stipulated under statute and to cater for withdrawal requests of member depositors. Other SACCOs also hold cash balances at other financial institutions in exchange for other services with mortgages constituting the chief asset of SACCOs, especially those which are financially sound. Mortgages have long-term maturities. The

borrowers can usually prepay (Madura, 2012). However, many SACCOs especially financially weak ones prefer to avoid loans with long maturities.

Savings and credit cooperatives utilise most of their financial resources in advancing loans to their members. These loans finance acquisition of land by members, home improvement, purchases of automobiles, paying children's school fees; and other personal expenses. Besides providing loans, SACCOs invest in economic assets as well, like procuring government bonds and agency securities to sustain optimal liquidity. Degrees to which SACCOs can offer various products and services are influenced by the Sacco Societies Act 2008 and by their location. They tend not to make risky investments. They invest in varied types of securities that assure low risk (Mishkin & Eakins, 2012).

Vision 2030 is a strategic development plan with the intention of turning Kenya into a universally competitive and affluent country characterized by a tall quality of life by 2030. Its objective is to quicken the change of the nation to a rapid industrialised middle income nation by 2030. The strategy for implementation and realisation of the vision is broken down into five-year medium term rolling plans (Luethge & Han, 2012). The targets for growth were projected to be above 7 percent yearly in order to meet the Millennium Development Goals (MDGs) by 2015 and fulfil the Vision objectives by 2030. Vision 2030 is anchored in economic, social and political pillars in aspiration to meet the MDGs for Kenya by 2015. The Vision is built on the following items: macro-economic stability for long-term development, continuous reforms in governance, equity enhancement and creation of wealth.

The cooperative sector is not prominent in the Vision 2030 as was the case in previous development plans. The opportunities for the sector to thrive are however vast.. Within the economic pillar-financial services-, (that is, banking, insurance, capital markets and pension funds), reference to SACCOs and micro-finance institutions is made with particular mention of cooperatives in the statement; establishment and strengthening of informal traders' associations to form SACCOs for enhancing savings mobilisation in order to provide affordable finance and enhancement of management of SACCOs. The First Medium Term Plan (ROK, 2008), reports that of the 4900 SACCOs, serving 2.1 million Kenyans, only 155 are based in the rural areas.

According to Kobia (2011), 27 percent of Kenyans have access to financial services, including banks 19 percent, SACCOs and microfinance at 8 percent. Another 35 percent have access to informal financial services provided by Rotating Savings and Credit Associations (ROSCA), and merry-rounds of relatives and friends revealing that 38 percent of Kenyans have no access to these products and services (Kobia, 2011). Cooperatives play a critical role in Kenya's economy. The greatest part is contributed by financial cooperatives. The main players are SACCOs, KUSCCO, Cooperative Bank and CIC, which hold significant savings portfolios. Cooperative development in Kenya, as in many countries has traversed two main eras: state control and the period of liberalisation.

Most of the organisation's capital allocation decisions were made in the past. This means that the strategic assets, whether tangible or intangible, are traceable to the investment decisions which were made yesteryears. Capital allocation decisions are usually made by top management. This is more so in large divisionalised companies,

where a central concern of top management at the corporate head office is to allocate capital across strategic business units and to manage the investment decision-making activity in the entire group (Chandra, 2015).

The allocation of resources by the market may not be efficient. It results in market failure, which will attract government intervention. When the market fails to deliver efficient resource allocation, loss of economic and social welfare to members is likely to arise. According to Jhingan and Stephen (2011), resources are the means to certain ends. Economic system main intention is to facilitate the allocation of scarce resources. Resource allocation is how the available factors of productions are allocated among various uses to which they might be put. It determines the amount of goods and services have to be produced. Uses of resources in one investment project will affect the other project having relationship through common input. If one project fund increases with given scarce resources, then the other project fund decreases. The firm has to ration capital on various projects. The optimum allocation of resources between two projects will depend upon the rate of return from the project and the resultant cost savings from the investment to the society. Funds allocation strategy involves purchase and sale of assets, economic assets and marketable assets in primary and secondary markets and includes use of resources or savings to create other assets or acquire existing assets.

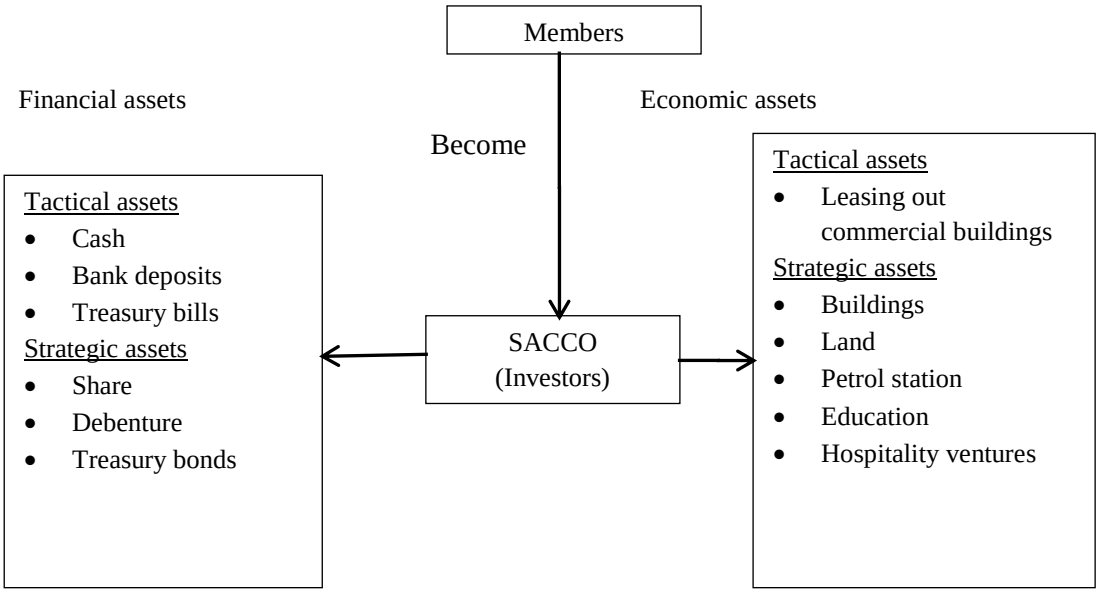

Figure.2.3: Funds allocation strategy. Source: Author (2017)

The effort is to evaluate acceptable projects. The project selection is dedicated by the nature of net present value. The project that has positive net present value is selected. Investment decisions relate to the total amount of assets to be held and their composition in the form of strategic and tactical assets and influence the risk the business enterprise is exposed to with attitude towards risk by investors key (Hampton, 2013).

Funds allocation strategy should be guided by asset allocation principles which stipulate that the investment manager should make forecasts of expected returns, standard deviations, and co-variances for all available securities. A portfolio has to be constructed which will indicate the ratio of investment in each of the securities contained in the portfolio. An efficient set is formed and the optimal portfolio is

identified and selected (Sharpe, Alexander & Bailey, 2011). The portfolio may be invested in short–term or long-term assets. The short-term investment is referred to as tactical funds allocation which matures within one year. The long-term investment is referred to as strategic funds allocation which matures in more than one-year period. Assets included in tactical investments are marketable securities, that is, cash equivalents, treasury bills, certificate of deposits and commercial papers. Strategic investments include treasury bonds, shares, real estate and debentures (Chandra, 2015). Funds allocation strategy largely determines an investor's success or lack thereof.

Efficient allocation of funds is informed by the market forces. SACCOs should put in place structures to ensure that efficiency in their organisations is achieved. There are three ways in which SACCOs will ensure that funds are utilised effectively and efficiently. Allocation efficiency should be adopted so that direct savings and retained earnings are invested in the most efficient and productive enterprise. Operational efficiency should ensure that costs are minimised to enhance members' benefit. It is also important that information efficiency should be in place so that the future prospect of a security is reflected in the current price (Nagarajan & Jayabal, 2012). In conclusion, most SACCOs invest in various investments, namely; loans, liquid and illiquid investments and non-earning fixed assets.

Most of the activities of financial institutions are affected by macro-economic factors. The government is the main player in ensuring that business fluctuations in the economy are controlled. The aim of the government is to stabilise economic activities so as to avoid the ill-effects of booms and depressions. The government invokes three instruments to influence the operations of financial institutions. The

three instruments comprise: monetary policy, fiscal policy and regulatory framework. Funds allocation is influenced by government activities and instruments. This prompts a debate as to whether funds allocation of SACCOs moderated relationship between capital adequacy framework and the financial performance of deposit taking SACCOs in Kenya (Klein, 2016). To ascertain this, the following hypothesis was tested. H_7: Funds allocation has no moderating relationship between capital adequacy framework and financial performance of deposit taking SACCOs in Kenya.

2.4.7 Financial Performance measures in SACCOs' Perspective

This section explains various factors which relate to SACCOs financial return which include: earnings management, strategies for income management, dividend policy and performance measures (Njuguna, 2009). Capital management and financial gain are important factors in any business enterprise. Anybody would like to do business with minimum capital and obtain maximum returns. Other entities such as creditors, customers, lenders and employees that deal with such a business venture would also like to deal with a viable business unit (Madura, 2012). Any lender would like to ensure that the debt-equity ratio is reasonable. Any creditor would like to get paid in time, and he would, therefore, consider the liquidity position of the company. One significant parameter of financial strength is capital or net worth. Therefore. it becomes crucial to have adequate capital and to demonstrate that the owners have good stakes in the financial business. Any SACCO business is no exception to this.

In measuring the profit performance of SACCOs, PEARLS is employed as a monitoring and evaluating system. The World Council of Credit Unions (WOCCU) recommended it as a financial performance measure for credit unions as it contains

fundamental indicators in six key areas: protection, financial structure effectiveness, asset quality, rates of return and costs, liquidity and signs of growth (Pistelli, 2014). SASRA should embrace this performance measure so that it can correct the deficiencies before SACCO's fail. The more failures it can prevent, the more confidence the public will have in the SACCO industry (Njuguna, 2014).

The most notorious cause of Sacco's failure is poor management. Unfortunately there exists no reliable measure of poor management. Hence, WOCCU rate SACCOs or credit unions by six characteristics that constitute the PEARLS ratings. They include:

Protection evaluates the adequacy of SACCO's provision for loan losses and scores adequate if a SACCO has sufficient resources to cover 100% of all loans delinquent for more than 12 months and 35% of all loans delinquent for 1-12 months.

Effective financial structure: this evaluates assets, liabilities and capital. It also recommends an "ideal" structure for savings and loans SACCOs are advised to increase productive assets as a means to achieve sufficient earnings.

Asset quality: Non-productive assets do not generate income and include buildings and equipment whose contribution are intangible. The WOCCU target limits SACCOs to a maximum of 5% of total assets. The higher the ratio, the more difficult it is to generate sufficient assets.

Each SACCO should make decisions on allocation of deposited funds which determine its level of credit risk. SASRA thus evaluates the quality of the society's assets which include its loans and securities. The 5cs are applied when assessing the quality of the loans extended by SACCOs. These comprise capacity, collateral, condition, capital and character of the potential borrower.

Rate of returns and cost: This measures the average income return for each of the most productive assets of the firm. Also, the average cost yield for each liability and capital accounts. These are found in the balance sheet. It assists management to determine the investments which are most profitable depicting how effective the SACCO has invested its productive resources. The "ideal" target recommended by the WOCCU is to maintain costs between 3.5-5% of average total assets. Society may feel that following liberal policy may result in more bad debts and more cost on the funds blocked by liberal credit. This may prompt a society to switch over to tight policy to overcome the bad debts and also to reduce the cost involved in advancing credit. Before the SACCO makes final decision on changing policy, it has to consider the benefits and costs involved in effecting the change. In case the benefits exceed the costs in the new policy, that is, liberal to tight or vice versa, it would be economical to embrace change. However, if the costs exceed the benefits from the new policy, it is advisable to continue with the existing policy. The bottom line of final decision is the rate of return of a given policy.

Liquidity: relates to cash needed for withdrawals. PEARLS analyses liquidity from three perspectives; total, reserves and unutilised funds. The WOCCU ideal target of total reserves is to maintain a minimum of 20% of the deposit savings in liquid accounts. SACCOs are required to maintain a reserve of the amount equivalent to 10% savings deposits. The reserves could be channelled toward future payment of dividends or interests on members' deposits should need arise. Idle liquid funds are non-earning liquidities. The WOCCU ideal target is to reduce the percentage of these liquidities to as close to zero as possible. Cash flows mapping is very important in ensuring sufficient liquidity in the society. The cash outflows and

inflows should be evaluated to make sure cash inflows exceed cash outflows. In case cash outflow is more than the inflows, a firm will mostly encounter liquidity problem. To enhance efficiency of cash management, collections and disbursements should be well managed and monitored frequently. In case of payables, a society should conserve its cash resources by making arrangements with its suppliers to set due dates of their bills to match with society's period of peak receipts especially during second payment of tea proceeds. Synchronisation of cash outflows and inflows will facilitate greater utilisation of cash resources.

Signs of growth: this measures percentage change between current and past year performances. The items include: total assets, loans deposits, external credit shares, institutional capital and members. If a SACCO is not growing, then it is recapitalising itself, especially when inflation keeps rising. Each of the characteristics examined relate to the society's management. Furthermore, SASRA rates the management based on administrative skills, market flexibility. It also assesses the internal control systems, that can make detection of a firm's financial problems easy (World Council of Credit Unions [WOCCU], 2014).

The Balanced Scorecard is another measure of performance. It has a set of targets and results encompassing four dimensions of performance. The dimensions include: financial, customers, internal processes and innovation (Lal, 2008). Its main purpose is to achieve firm's objectives. In formulating their objectives, various stakeholders are taken into account and include workers, contractors, clients, community and the stakeholders. They have different competing wants. The firm has to balance these competing wants. Members depend on a SACCO to maintain their investments.

A descriptive balanced scorecard is shown in figure 2.4.

Four perspectives of a balanced scorecard

Dimensions	Objectives	Measures
Financial	Is the SACCO achieving its financial objectives?	Operating income Return on asset Cashflow from operations Reduction of administration expenses Lending growth
Customer	Is the SACCO meeting customer expectations?	Customer satisfaction Customer retention New customer acquisition Market share On time delivery Time to fill order
Internal processes	Is the SACCO improving critical internal processes?	Default rate Lead time Number of lenders Loan turnover
Innovation	Is the SACCO improving its ability to innovate?	Amount spent on employees training Employee satisfaction Employee retention Number of new products Number of patents

Figure: 2.4. Measures for the four perspectives of a balanced scorecard

Source: Lal, (2008)

According to Drury (2012), the process of business re-engineering involves evaluating processes and effecting crucial changes on the current operation of a SACCO currently operates. It encompasses redesigning activities. These processes consist a collection of interlinked activities co-ordinated to achieve specific objectives. Loan processing for example can be classified as a business process

comprising separate activities relating to receiving loan application, analysing applicants and disbursing loans. Business process re-engineering is aimed at improving key processes in a SACCO by focusing on simplification, reduction of cost, improving quality and enhancing customer satisfaction. The processes of SACCOs should be automated so that economy, efficiency and effectiveness can be achieved.

SACCOs make their financial decision by comparing the rate of return of various investments within the country. If rates of return from a given investment are larger, they will allocate their funds to that kind of investment. Return arbitrage refers to the process of moving funds from one investment to the other to take advantage of higher investment yields (Imungi, 2013). However, SACCOs assume a risk when they invest in any project because the returns are not guaranteed. SACCOs can reduce risk by investing in more than one business entity.

2.5 Research Gap

From the literature available, it appears that there is no single factor which influence business performance of firms. Macro and micro environmental factors have an impact on business performance. According to Mwatu (2015), external funding could cause financial difficulties if misallocated whereas internal funding is positively correlate with profitability. The literature review showed that SACCO capital adequacy framework and funds allocation strategy research have been low despite the contribution of SACCOs towards business performance (Onyango, 2013).

It is evident from the findings that there exist several gaps in the current management of deposit-taking SACCOs in Kenya. From all the outcomes in the seven variables, it indicated that the capacity to sustain deposit taking business has a bleak future. The declining trend of licensed SACCOs supports these results. The vision 2030 may be achieved, if the seven variables and others not included in the study are addressed.

2.6 Summary

This chapter discusses the literature review and theoretical framework on financial management. The literature reviews capital adequacy framework of deposit-taking SACCOs. It elaborates factors contributing to the prudent financial management of DTS.

The empirical evidence gives out prior studies carried out on deposit-taking societies locally and externally. Studies have been undertaken to establish the factors that affect SACCO performance. The factors that contributed to slow growth of SACCO ranged from corporate governance and issues of management to non-remittance of funds In the past, management of cooperative societies in Africa has been a point of interest to many researchers. It is a gateway to reduce poverty in the rural areas (Ngaira, 2014). The SACCOs have been struggling with inadequate financial resources. Even though the resources are scarce, the management has been misallocating them to wrong ventures. These have resulted in losses to the members and the general public due to factors including corruption, nepotism, fraud, agency problems and political interference.

Deposit-taking SACCO is a new business venture in Kenya. The government started it in 2010. However, there is no research in the literature available relating to capital adequacy framework of DTS. It is on this basis that this study attempted to find out if capital adequacy framework has had any impact on the DTS operations and performance (Wallace & Naser, 1995). If the DTS is having problem in managing their resources, then they have to adhere to prudent financial management practices. Table 2.1 shows a summary of literature reviewed and the knowledge gaps identified.

Table 2.1: Summary of Research Gaps

Authors	Focus of Study	Findings	Research gaps
Wong.J.et.al (2015)	Determinants of the performance of banks in Hong Kong.	The effects of Structure-Conduct -performance on Performance was Positive.	The study focused on cost efficiency and ignored managerial capability. This study sought to fill the research gap by including managerial capability.
Mosongo, (2013)	Financial innovation and financial performance among SACCOs in Nairobi county.	Financial innovation improves financial performance.	The study focused on financial innovation. Funds allocation strategy was not taken into account.
Chumo.J. (2013)	The effects of regulatory compliance on the financial performance of deposit taking SACCOs in South Rift region in Kenya.	Regulatory compliance improves financial performance.	The study only evaluated on regulatory compliance. Risk management was ignored.
Gweyi and Karanja (2013)	The effects of financial leverage on financial performance of SACCOs in Kenya.	It established that firm size, growth rate and liquidity affect performance.	The study ignored portfolio selection.
Mpiira.et.al (2013)	Factors influencing participation of households in SACCO activities in Uganda.	Increase in incomes and distance from SACCOs hinder members participation.	The study did not take credit management into account. Strict credit management can hinder households participation.
Kivuvo and Olweny (2014)	Altman Z score model as determinant of corporate bankruptcy.	It was established that as external financing increases there is a high chance of bankruptcy.	The study did not consider internal financing.Using internal funds reduce bankruptcy among SACCOs.
Nimalathasan (2014)	The capital structure and its impact on profitability of listed manufacturing companies in Sri Lanka.	Debt-equity is positively related to all profitability ratios.	The study ignored the contribution of external funds to financial performance

Source: Researcher (2018)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter elucidates the methodology used in conducting the study. In this section, the research design, population, data collection and analysis methods are included. Primary and secondary data were used to achieve the intended purpose of the research. Questionnaires were used to collect data from CEOs, Financial managers and Credit managers from all the SACCOs. The study investigated the effects of capital adequacy framework and funds allocation strategy on financial performance.

3.2 Research Philosophy

This research adopted positivism philosophy because the concept of positivism relates to the philosophical stances of natural scientists. The philosophy gives preference to utilizing observable social realities research; the conclusion of which can be law-like generalisation akin to those produced by physical and natural scientists.

According to Blaxter, Hughes and Tight (2013), positivism posits that the procedures of social sciences should mirror the natural science ones. Researchers should be impartial in the research. Positivist researches aim to elucidate findings that lead to control and predictability. It is a predominant method of understanding the social world as evident from its usage.

Data collected from DTS in Kenya were credible. An existing theory was used to develop hypotheses which were tested and confirmed. Where the hypothesis is

refuted, further development of the theory may ensue (Saunder, Lewis & Thornhill, 2016). The hypotheses developed may result in collection of facts for subsequent hypothesis testing. The researcher embraced good judgment by being systematic and methodical in data collection and analysis.

3.3 Research Design

This study employed descriptive survey design which was quantitative. Descriptive research design was adopted because the study covered an examination of capital adequacy framework, funds allocation strategy and business performance of deposit taking SACCOs in Kenya. Descriptive survey facilitated the establishment of relationship of events or processes without affecting the purpose of reporting the situation as they are. This design was appropriate for the study since it would allow an opportunity for exploratory and descriptive data. This form of data was crucial in understanding capital adequacy framework and its influence on business performance of DTS in Kenya. Descriptive research design involves measurement of study variables as they naturally exist.

According to Beri (2015), it outlines methods for conducting particular studies. The approach to be used should be specified. These designs are categorised into exploratory, descriptive and causal research. This study used descriptive research where factors including age, sex, level of educational, and income were considered and intended to answer the what, who, where, when and how" of the study.

Surveys were conducted in this study to describe record, analyse and interpret conditions that either exist or existed without any manipulation further considering

existing relationships, opinions, on-going processes and developing trends including past events that influence current conditions.

According to Aldridge and Levine (2012), social surveys involve overall decisions on collection and analysis of data. Social survey strategy encompasses collection of the same information about all the cases in a sample. According to Martz (2013), survey involves systematic observation or interviewing. Respondents were asked the questions to which they responded based on the answer options available. The survey was standardised so that consistent answers to the respective questions can be drawn.

Kothari (2014) defined research design as setting the conditions for collecting and analysing data such that it is relevant to the economy. Reliability, completeness and clarity of findings are important to successful research. The most appropriate techniques should thus be employed to realise the desired goal. This section elucidates the study design and methodology: data sources, collection and census survey, organisations and mode of conducting the study including the tools of analysis used (Peria & Schumuler, 2013). The unit of analysis for this study is Deposit Taking SACCOs (DTS) in Kenya. DTS are accredited by SASRA to take deposits from their members annually. The research objective was to evaluate the capital adequacy framework and funds allocation strategy on financial performance of Deposit Taking SACCOs in Kenya.

The research design primarily ensured that the findings of the study concisely met the research objectives. A good research design should reduce the research process by segmenting the research work into manageable parts, effectively making research

objectives projects. The design should minimise partiality and maximise the reliability. Similarly, it should yield maximum information and provide opportunity for inclusion of vast aspects of a problem. The research tools specific to the unit of analysis was customised and used. To attain better findings, two or more research methods were used. This would cater for the information missed by one method.

Research methodology is a systematic way of solving the research problem. It is a scientific way of doing research in a given environment (Strandberg, 2012). It involves collecting, analysing and reporting data; that is the structure used in collection, analysis and interpretation of information to elicit meaningful answers to research objectives. The research methodology included two aspects; collection of data and analysis of data. Primary data was collected through surveys, questionnaires and structured interviews and thereafter cross-checked against secondary data available from SASRA records, especially deposits taking SACCOs profiles and financial statements.

3.4 Target Population

The target population was 164 DTS in Kenya which were licensed in 2016. In the study, unit of analysis was deposit taking SACCOs in Kenya since they are thriving to improve financial performance for their members. The intended participants were the chief executive officers, financial managers and credit officers of the SACCOs in Kenya. Construct and concept of the study are internal financing, external financing, portfolio selection, credit management, risk management, managerial capability and capital adequacy framework respectively. The questionnaires were issued to the chief executive officers from all licensed SACCOs. County cooperative officers and

research assistants assisted in issuing them and also ensuring that all the questionnaires are filled and returned. Selection of three officers was justified by the fact that they are responsible for running financial matters of the societies. Appendix VI shows a list of respondents,

3.5 Sampling Frame

The intended census survey turned out to be a sample survey. A representative of the population responded to the study. This prompted sampling technique to be used in this survey. Sampling frame comprises a list of all units of the population (Mutai, 2013). The preparation of a sampling frame is sometimes a major practical problem. The frame should be updated and be free from errors of omission and duplication of sampling units. It represents a list of components wherefrom the sample was actually drawn. For this study, the sampling frame comprised 164 deposit taking SACCOs licensed in 2016 as shown in Appendix VII.

3.6 Sample Size and Sampling Technique

According to Saunders, Lewis and Thornhill (2016), generalisations about population from collected data from any probability sample are based on statistical probability. The larger the size of a sample, the lower the error likelihood in generalisation. Probability sampling balances the accuracy of outcomes with time and resources expended to collect, check and analyse data. The sample size choice hinges on the confidence required in the data, the acceptable margin errors and the total population size.

According to Mutai (2013), a sample size for a survey is decided at the planning stage together with the sample design. Resources and time dedicate the sample size

to be used. The purpose of sampling is to economise on the use of resources in gathering information. It is uneconomic to obtain data on the whole of the population of interest and so information is collected from only a part of the population (sample). The sample is designed to produce outcomes which are generalisable from the sample to the whole population under consideration.

Saunders, Lewis and Thornhill (2016) noted that with a population of less than 10,000 a smaller sample size can be employed without affecting the accuracy. This is known as adjusted minimum sample size. The formula below was used to obtain adjusted minimum sample. According to Mugenda and Mugenda (2003), where an estimate of the proportion in the target population assumed to have the elements of interest say 50% is available it should be used. Its level of significance is 5%. Then, the sample size can be determined as follows:

$$n = \frac{Z^2 pq}{s^2} = \frac{1.96^2 (0.5)(0.5)}{0.05^2} = 384$$

Where n= the desired sample size

Z= the standard normal deviate at the required confidence level

P= the proportion in the target population estimated to have characteristics being measured

q=1-p

s= the level of statistical significance set

If the target population is less than 10,000, the required sample size will be smaller and is calculated using the formula below (Mugenda & Mugenda, 2003).

$$n_i = \frac{n}{1+\frac{(n-1)}{N}} = \frac{384}{1+\frac{(384-1)}{164}} = \frac{384}{1+\frac{383}{164}} = \frac{384}{3.335} = 115$$

$n_i = 115$

The respondents were 111 and pilot survey was conducted on 12 SACCOs. The total SACCOs participated in the survey were 123.These were good representative of the population.

3.7 Data Collection Instruments

A survey questionnaire was employed to collect primary data on perception, experience and views on deposits taking SACCOs on the capital adequacy framework and funds allocation strategy process on financial performance. It comprised three sections, A B and C which all respondents completed. The respondents comprised CEOs, finance managers and credit officers of SACCOs. Each respondent should give his/her opinions independently. The responses were separated to enable evaluation of differences in opinion on capital adequacy framework and funds allocation strategy on financial performance, notably regarding challenges faced in achieving business obligations. The summary of the items included in the questionnaire are as follows:

SECTION A: This evaluated the deposit taking SACCOs environment. The data from the survey should reflect the current capacity levels. These included: the respondent education levels, membership levels, deposit level, common bond and funds allocation strategy. SECTION B: Purposed to obtain the perceptions of deposit taking SACCO respondents who had witnessed capital adequacy framework implementation and funds allocation strategy process.

SECTION C: This section was designed to determine the effects of financial performance measures. Pre-testing of the questionnaires with a pilot group was carried out to detect weaknesses in design and instrumentation and also to train the research team.

SASRA (2016) indicates that 164 SACCOs in Kenya were accredited to take deposits from their membership in 2016. The researcher conducted a census research on 164 DTS in Kenya. The respondents were 111 out of 152 SACCOs. The twelve SACCOs participated in pilot survey. There were 164 deposit taking SACCOs as per SASRA licensing report 2016. The researcher and his team elicited views from the respondents. The respondents were assisted in filling the survey questionnaire by research assistants.

3.8 Pilot Test Study

Questionnaires are subjected to pilot testing to ascertain that they are reliable before issuing to intended respondents (Sekaran & Bougie, 2016). A pilot test was conducted to ensure that the intended objectives of the study are attained through the questionnaire. Twelve deposit-taking SACCOs were used to measure the reliability and validity of the instrument. Purposive sampling was used to select twelve SACCOs from deposit-taking SACCOs licensed in 2016. Hertzog (2016) posited that samples as small as 10 to 15 per group are sufficient for pilot testing. In case of Isaac and Michael (1995), 10 to 30 participants are adequate for pilot testing. The costs, time and reality of the exercise are taken into account. In this study, twelve participants were within the recommended range. The category was not part of the target population and this guaranteed that those participating in the pilot study were

not included in the actual sample. The participants were either CEOs, Finance managers or Credit officers.

This made it possible to get required information from the relevant employees. All of them had financial knowledge which was the area of interest in the research. According to Saunder, Lewis and Thornhill (2016), pilot-testing ensures that questionnaire is refined such that problems in answering them are reduced or eliminated. Cronbach's alpha was employed to establish internal consistency and reliability of the questionnaire based on the pilot test results. The Cronbach's alpha was more than 0.700 which indicated that the variables were reliable.

3.9 Measurement of Variables

This study involved measurement of eight variables namely: internal financing, external financing, portfolio selection, credit management, risk management, managerial capability, funds allocation and financial performance. The capital adequacy framework for this study include; internal financing, external financing, portfolio selection, credit management, risk management and managerial capability. Likert scale (1-5) was used for each of the statements corresponding to the different parameters of the capital adequacy framework. The moderating variable for this study was the funds allocation which had two types of allocations. Deposit-taking SACCOs were required to state how they allocate their funds to various undertakings. A five point Likert scale was utilised for each of the statements corresponding to the six parameters of the financial performance. The financial performance is measured by PEARLS system (WOCCU, 2014).

Table 3.2 Measurement of Variables

Variable Name	Indicator	Measure	Scale	Instrument
Internal financing	members deposits 15% liquid assets Internal funds Institutional capital	Likert Ordinal	5 Point Likert Scale	Questionnaire
External financing	Short term loans Long term loans Borrowings (<25%)	Likert Ordinal	5 Point Likert Scale	Questionnaire
Portfolio selection	External consultants Physical assets Financial assets Not engaging in prohibited Investment < 40% of capital Non-earning assets<10%	Likert Ordinal	5 Point Likert Scale	Questionnaire
Credit management	CRB member Insider trading Credit evaluation Monitoring loans Collateral security Screen customers Established customer relationships	Likert Ordinal	5 Point Likert Scale	Questionnaire
Risk management	Loan policy Contingency plan Aged analysis of loans	Likert Ordinal	5 Point Likert Scale	Questionnaire
Managerial capability	Qualified staff Research and Development Financial innovation	Likert Ordinal	5 Point Likert Scale	Questionnaire
Funds allocation	Tactical assets Strategic assets	Likert Ordinal	5 Point Likert Scale	Questionnaire
Financial performance	Protection Effective financial structure Asset quality Rate of return Liquidity Signs of growth	Likert Ordinal	5 Point Likert Scale	Questionnaire

Source: Author (2017)

3.10 Methods of Data Analysis.

After collection of data, the researcher classified the raw data into purposed categories. First numerals were assigned to the answers so that responses could be analysed quantitatively. Assigning numerals to responses is referred to as coding. Coding was necessary for easy analysis (Agrawal, 2014). A database of the responses was created in SPSS, with each of the questions treated as a separate variable and responses as categories. The completed database template of responses was loaded into a statistical package for analysis. Data was then analysed using descriptive statistics. Findings were presented using simple tables. Interpretations were emphasised on the written text. Data analysis techniques including mean, frequency, cross tabulation regression and percentage were derived and interpreted.

Regression model were used in analysing the data collected. The models are expressed as follows;

Direct effect model

$$Y = b_0 + b_1 x_1 . + b_2 x_2 + b_3 x_3 + b_4 x_4 + b_5 x_5 + b_6 x_6 + e.$$

Interaction of moderator model

$$M = b_0 + b_1 Z x_1 . + b_2 Z x_2 + b_3 Z x_3 + b_4 Z x_4 + b_5 Z x_5 + b_6 Z x_6 + e.$$

Interaction effects model

$$Y = b_0 + b_1 CAF_1 + b_2 Z + b_3 CAF_* Z + \varepsilon$$

Where;

Y=Financial performance

b_0 Intercept

$b_1 - b_6$ =Regression coefficient

x_1 = Internal financing, x_2= External financing, x_3= Portfolio selection

x_4= Credit management x_5= Risk management $x_{6=}$ Managerial capability

Z= Fund allocation (Moderator)

e = -error term

bZ = Product term/interaction term of funds allocation with each of the

x_1-x_6 =independent variables

Moderated multiple regression (MMR) was used to test the moderating effect of funds allocation. MMR analysis was used to compare the moderating effect of the funds allocation by analysing and interpreting the R^2 change in the models obtained from the model summaries so as to test the hypothesis that funds allocation moderates the connection between capital adequacy framework and financial performance (Owusu-Ansah, 2014).

Multiple regression can be used for three situations. First, to develop a self-weighting equation by which it predicts values for a criterion variable (DV) from the values for several predictor variables (IVs). Thus, we might try SACCOs' financial performance on the basis of capital adequacy framework and funds allocation strategy. Second, a descriptive application of multiple regression calls for controlling for confounding variables to better evaluate the contribution of other variables. For instance, where one wishes to control financial factors and funds allocation strategy which may influence performance of DTS. Non-financial factors may be ignored. Thirdly, to test and explain casual theories. Regression is utilised to describe linkages advancing from a casual theories. Besides being a descriptive tool,

it is also used as an inference tool to test hypotheses and to estimate population values (Cooper & Schindler, 2015).

3.10.1 Coefficient of Determination

This is used to predict the values of dependent variable absent of any knowledge of independent variables; the best estimate the estimated dependent variable. Its mean and standard error of estimate is the different between the actual and the predicted values of dependent variable (Belsey, Kuh & Welsch, 1980). This testing helps in discovering if the regression equation is more effective predictive device than the means of the dependent variables.

3.10.2 Correlation Analysis

Where two variables are interrelated in a way that changes in one create corresponding changes in the other, the variables are deemed correlated. Measure of correlation is called coefficient of correlation. The Karl Pearson's method is most widely used in practice. It is known as Pearsonian coefficient of correlation. The coefficient of correlation is denoted by the symbol r. Correlation presents the relationship among various variables of the study. Some variables have strong relationship whereas others have weak relationship. Their relationships are explained as follows (Cameron, 2004).

Table 3.3: Guidelines for Strength of Relationship

Value of r	Strength of the Relationship
-1 to- 0.5 or +1 to 0.5	Strong
-0.5 to -0.3 or 0.5 to 0.3	Moderate
-0.1 to -0.3 or 0.1 to 0.3	Weak

Source: Field (2015)

3.10.3 Normality Test

When analysing data in multiple regression model, it is a requirement that data should be normally distributed. Normality test was ascertained by using skewness and kurtosis statistics. Skewness shows how distribution of values deviates from symmetry around the mean. A value of zero means that the distribution was symmetric, whereas a positive skewness indicated a greater number of smaller values and a negative value indicates a greater number of larger values. In case of kurtosis values near zero indicated the shape of data was close to normal. A negative value indicated a distribution that was more flat than normal. A positive value indicates that was more peaked than normal. A value of a negative 2 is adequate for statistical analysis for both skewness and kurtosis (Gujarati & Porter, 2009).

3.10.4 Multicollinearity Test

The study used variable inflation factor (VIF) and Tolerance statistics to test multicollinearity. Field (2015) states that multicollinearity exists when VIF is greater than 10 and tolerance is less than 0.1. When the degree of association of independent variables is high, it means multicollinearity may exist among the independent

variables. If it exists, it means that the model could include either variable, interchangeably.

3.10.5 ANOVA Test

This was used to ascertain if the model could significantly predict outcome. This technique tests the differences among the means of the populations by examining the variation within each of the samples, relative to the amount of variation between the samples (Kothari, 2014). ANOVA consists of evaluations that provide information about the levels of variability within a regression model and forms a basis for test of significance.

3.10.6 Factor Analysis

According to Sekaran (2013), it helps reduce the number of variables to meaningful interpretable and manageable set of factors. In case a questionnaire would like measure seven variables of internal financing, external financing, portfolio selection, credit management, risk management, managerial capability and funds allocation with 3 questions tapping for each. When 21 items are analysed, 7 factors with the right variables loading on each factor will be the outcome. This confirms that the variables were measured correctly.

3.10.7 Testing of Hypotheses

In analysing data and also testing hypotheses of the study, descriptive and inferential methods and SPSS 23 version statistical software were employed. Test established the relationship between independent variables and financial performance. Rejection region method was used when determining the significant value of the independent variables and dependent variable. It has two options either accept the null hypothesis or otherwise. Where the computed test value statistic is greater than the tabulated

value, it indicates that it is significant and the null hypothesis (H_0) is rejected at a level of significance (α) that is with confidence coefficient (1-α). Tabulated value is critical or significant value at a given level of significance (α). However, in case the computed value of test statistic is less than the tabulated (critical) value, we say that it is not significant (Penman, 2016). It means that the difference between the sample statistic and corresponding parameter-value under H_0, is resultant of fluctuations of sampling. It indicates that the data sampled does not provide satisfactory evidence against the null hypothesis. It may therefore be accepted at α level of significance. Pearson correlation test was used in testing hypotheses. The study established that the null hypotheses were rejected. Since the p-value (0.000) is less than 0.05 level of significance. It shows that the independent variables and moderating variable influence financial performance of deposit taking SACCOs in Kenya.

Table 3.4: Tests for Hypotheses

Objectives	Hypothesis	Type tests	Interpretation
To examine the influence of internal financing on financial performance of deposit taking SACCOs in Kenya	H_{01}:Internal financing has no significant influence on financial performance of deposit taking SACCOs in Kenya	Pearson correlation Linear regression analysis	**I**f p-value < 0.05 reject null hypothesis if p-value>0.05 fail to reject the null hypothesis
To determine the influence of external financing on financial performance of deposit taking SACCOs in Kenya	H_{02}:External financing has no significant influence on financial performance of deposit taking SACCOs in Kenya	Pearson correlation Linear regression analysis	If p-value < 0.05 reject null hypothesis if p-value>0.05 fail to reject the null hypothesis
To establish the influence of portfolio selection on financial performance of deposit taking SACCOs in Kenya	H_{03}:Portfolio selection has no significant influence on financial performance of deposit taking SACCOs in Kenya	Pearson correlation Linear regression analysis	If p-value < 0.05 reject null hypothesis if p-value>0.05 fail to reject the null hypothesis
To examine the influence of credit management on financial performance of deposit taking SACCOs in Kenya	H_{04}:Credit management has no significant influence on financial performance of deposit taking SACCOs in Kenya	Pearson correlation Linear regression analysis	If p-value < 0.05 reject null hypothesis if p-value>0.05 fail to reject the null hypothesis
To assess the influence of risk management on financial performance of deposit taking SACCOs in Kenya	H_{05}:Risk management has no significant influence on financial performance of deposit taking SACCOs in Kenya	Pearson correlation Linear regression analysis	If p-value < 0.05 reject null hypothesis if p-value>0.05 fail to reject the null hypothesis
To evaluate the influence of managerial capability on financial performance of deposit taking SACCOs in Kenya	H_{06}:Managerial capability has no significant influence on financial performance of deposit taking SACCOs in Kenya	Pearson correlation Linear regression analysis	If p-value < 0.05 reject null hypothesis if p-value>0.05 fail to reject the null hypothesis
To evaluate the moderating effect of funds allocation towards financial performance of deposit taking SACCOs in Kenya	H_{07}:Fund allocation has no moderating effect on capital adequacy framework towards financial performance of deposit taking SACCOs in Kenya	Pearson correlation Linear regression Analysis	If p-value < 0.05 reject null hypothesis if p-value>0.05 fail to reject the null hypothesis

Source: Author (2017)

3.11 Validity and Reliability Instruments

The validity and reliability of the instruments were tested to ensure that the results conform to the objectives of the study.

3.11.1 Test of Reliability

Reliability was tested using Cronbach's alpha. The study established that the findings are credible. Reliability of data was determined by calculating Cronbach's alpha reliability coefficient for each of the variables. When the Cronbach alpha is high, it shows high reliability and it means that the measuring instrument is consistent in its measurement. Reliability coefficient of 0.70 is sufficient for research instruments (Field, 2015). From this study, all Cronbach's alpha values were greater than 0.700. Hence no variables had to be removed. A common accepted rule of the thumb which is used to evaluate internal consistency using Cronbach alpha is presented in the table 3.5.

Table 3.5: Internal consistency-Cronbach's alpha

Cronbach's alpha	Internal Consistency
>0.90	Excellent
0.70<α<0.90	Good
0.60<α<0.70	Acceptable
0.50<α<0.60	Poor
α<0.50	Unacceptable

Source: Field (2015)

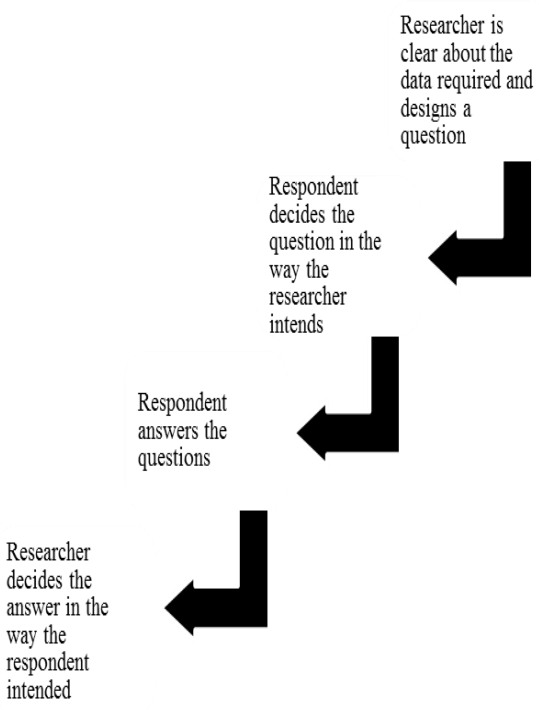

Figure.3.1: Validity and reliability stages of a question.

Source: Foddy (2014)

The questions and purpose of the research were elucidated to the respondents in order to reduce the possibility of error resultant of lack of understanding and ambiguities. Furthermore, the researcher cross-checked the outcome from the survey findings against the information which were available in the domain of deposit taking SACCOs. The characteristics of a good measurement tool should have three major criteria, namely; validity, reliability and practicality. Validity means the level to which a test measures what is intended to be measured. Reliability depicts the accuracy of measurement procedures. On the other hand, practicality deals with a range of factors including interpretability. The data validity reveals the level to which research findings represent actual happenings. Validity is most critical and

indicates the degree to which instruments measure they are intended to measure (Kothari, 2014). Data invalidity renders the research works worthless. Validity of questionnaires depends on the honesty of the respondents when filling the questionnaires and this study sought to minimise the risk of compromising the validity of the data by pre-testing the questionnaire so that weaknesses could be addressed before the actual survey is conducted. The researcher also explained the questions and purpose of the research to the respondents in order to reduce the possibility of errors resultant of misunderstanding the questions and ambiguities. The information collected from the survey was cross checked against information already existing in the domain of the deposit taking SACCOs.

At the beginning of the survey questionnaire, an introductory paragraph assures the respondents of the anonymity of their identity responses and this contributed to the data validity. In addition, triangulation was used to include three measures: questionnaires, interviews and secondary data from financial statements and SASRA reports (Sekaran, 2013). Measures are reliable to the level it supplies consistent results and is focused on the degree to which a measurement is free of random error and are concerned with the credibility of the findings. It is another important characteristic that a good measurement tool should have. Reliability refers to the consistency and the repeatability of the same results over time. It means that if the same research is to be conducted by someone else, he or she would obtain the same results, all other things kept constant. The data reliability and validity was enhanced by predicting potential biases and errors and eliminating them early.

One danger is if the respondents know that the researcher is a competitor and elect to distort their responses or refuse to take part in the study. This was mitigated by

assuring the respondents that the study was for academic purposes and confirmed this by the cover letter which bore the university's logo as opposed to the SASRA one.

Reliability was achieved by using same questionnaire on the same set of respondents using same method. Pre-testing questionnaires were done to ensure there was no problem in answering questions. Pre-testing surveys are very important when designing questionnaires. Pilot surveys thus assist in stopping and reorganising the main field work can be extremely difficult once the field work on the actual survey has started. Any problem encountered was corrected before administering the questionnaire to other respondents. This ensured greater reliability of the study. Respondents were encouraged to be free when answering questions as the result would be kept confidential. Time of filling questionnaire was chosen appropriately so that the respondents' activities were not interfered with.

According to Mitchell (2015), there are three approaches to test reliability: test, re-tests internal consistency and alternate form. This study embraced the three approaches. The data collected were correlated with those from the same questionnaire under similar conditions. Internal consistency was done by correlating the responses to each question in the questionnaire with those of other questions in the questionnaire and measured the consistency of responses across all the questions from the questionnaire. To ascertain internal consistency of the study, Cronbach's alpha was used and was more than 0.900 for all seven variables. This indicates that the study had higher reliability. Another approach used in testing for reliability was alternative form where check questions were invoked.

3.11.2 Testing for Validity

Internal validity was achieved in this study by ensuring that questionnaire measured what was intended to measure. The questionnaire was supposed to establish the relationship between capital adequacy framework and financial performance. The relationship was moderated by funds allocation strategy (Osoro, 2015). The findings showed that the independent variables influenced financial performance of deposit taking SACCOs in Kenya. The concepts of validity involve the three types of validity: content validity, criterion-related validity and construct validity. The content validity was expressed through adequate coverage of literature review and also making sure that the questions in the questionnaire were essential and useful. This facilitates the achievement of the intended objectives.

3.12 Ethical Consideration

All the participants were informed about the research and its benefit. The information and data provided by participants were used for research purposes only. All the information collected was treated as highly confidential. The researcher observed integrity and objectivity of the study to ensure quality by being open, truthful and promoting accuracy.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the results from the survey which were analysed and interpreted based on the purpose of the study. Hypothesis test results are presented and discussed. Questionnaires were issued to either CEOs, financial managers or credit officers of deposit taking SACCOs who have knowledge in financial matters. Reliability and validity of the study are discussed, along with various sensitivity results. The chapter closes with a summary of the findings.

4.2 General information

Section A of the questionnaire related to broad information on the society. The information included: the officials, the duration of SACCO operating deposit taking business, membership, current net worth of the society and educational background of officials.

4.2.1: Response Rate

The population targeted was the 164 licensed deposit taking SACCOs in Kenya in 2016. However, 12 SACCOs had restricted licenses for only six months (SASRA, 2016). A census survey was carried out of all 152 licensed SACCOs in Kenya excluding 12 SACCOs which participated in pilot testing. 152 questionnaires were sent to the deposit taking SACCOs in Kenya from which 111 filled questionnaires were returned while 41 questionnaires were never returned. The response rate was 73%. Hager, Wilson, Pollack and Rooney (2013) and Babbie (2004) argued that a response rate of 50% was acceptable to analyse and publish the findings.

Table 4.6: Response Rate

Response Rate	Frequency	Percent
Responded	111	73%
No Response	41	27%
Total	152	100%

The response rate of 73% in this survey was considered acceptable for analysis. According to Mugenda and Mugenda (2003), a response rate of 50% is considered adequate, 60% and above good and above 70% very good. The rate of response was enhanced by the technique applied in administration of the questionnaire which included using contact persons, making follow up calls and using research assistants who were trained prior to the survey. The statistics are shown in Table.4.6.

4.3 Extent of Capital Adequacy Framework Implementation, Funds Allocation and Finance Performance

According to Sekaran (2013), descriptive studies provide vital information of interest to the researcher. These were utilised to elaborate the basic elements of collected data the features of which were then presented in tables and figures In general, the study variables were summarised through the use of frequencies, percentages, means, standard deviation and figures. Data related to gender, age, years worked within deposit taking SACCOs, academic qualifications and job title of the respondents. The study variables were also discussed.

4.3.1 Respondents Gender

Gender is included in the study so that balance view can be obtained from the survey. Views differ depending on the contributors. If a survey has views from both gender it will give a fair consideration. Respondents indicated their gender by ticking against respective option of either male or female.

Table 4.7: Respondents' Gender

Gender	Frequency	Percent
Male	83	74.8%
Female	28	25.2%
Total	111	100%

It was evident from the results that most of the respondents were male which represented 74.8% whereas female represented 25.2%. The gender distribution indicated that there was a balance in distribution of views collected from both male and female. Even though the gender rule was not met. The findings confirmed what Mckillop, Briscoe, McCarthy, Ward and Ferguson (2003) who found out that there is gender imbalance in the Board of directors and management of credit union.

4.3.2 Age of the Respondents

Age in this study showed maturity and experience of respondents. It determined the quality of information collected from the survey.

Table 4.8: Age of the Respondents

Age	Frequency	Percent
20-25 years	3	2.70
26-30 years	12	10.81
31-35 years	27	24.32
36-40 years	13	11.72
41-45 years	11	9.91
46-50 years	22	19.82
51-55 years	23	20.72
56-60 years	0	0
Total	111	100.00

All the respondents stated their age category. It is evident from the results that most of the respondents were at 31-35 years. This represents 23.32% of the total population. Those between 46-50 years and 51-55 years were 19.82% and 20.72% respectively. Majority of the respondents were above 31 years. This indicated that the information given are vital to this study basing it on experience. According to Armstrong and Taylor (2017), experience improves level of performance in an organisation.

4.3.4: Duration Worked with the Deposit Taking SACCOs

The respondents stated the number of years they had worked with the deposit taking SACCOs. The duration showed the amount of time the respondents had worked with the society. It means that the respondent had adequate knowledge to answer questions without any problem. The information collected from the survey served the purpose of the study.

Table 4.9: Duration worked with DTS

Duration worked	Frequency	Percent
0-5 years	31	27.91
6-10 years	24	21.62
11 years and above	56	50.45
Total	111	100.00

The respondents who had worked for 11 years were 50.45% and above, 27.93% had worked for 0-5 years and 21.62% had worked for 6-10 years. The findings indicated that majority, 72.07%, had worked with the deposit taking SACCOs long enough to be conversant with the operations in deposit taking SACCOs. They were in a good position to provide vital information required for the study. According to Ngatia, Kyalo & Kiragu (2015), experienced staffs contribute a lot towards improvement of SACCOs in term of effectiveness and efficiency in business processes. This concurred with the findings.

4.3.5 Profile of Respondents

The study was interested in prudent financial management of financial resources of deposit taking SACCOs. The officers dealing with financial matters were chosen to answer questionnaires because they are the one with relevant information.

Table.4.10: Position in the SACCO

	Frequency	Percent
CEO	74	66.6
Credit Controller	3	2.70
Financial Manager	34	30.63
Total	111	100.00

As shown in table 4.10 above, the highest respondents were CEO and finance managers representing 97.30 percent in total. They are the one who handle financial

matters in the firm as such they had relevant information to the study. The respondents concurred with the findings of Mathuya (2016). Senior officials had considerable knowledge about the deposit taking SACCOs.

4.3.6: Profile of Qualifications

The professional and academic qualifications of the respondents were also indicated. The qualifications indicated managerial capability of managers. If managers did not have relevant qualifications, it could mean that they are not equal to the task. Hence resulting in misallocation of resources.

Table 4.11: Proportion of Qualifications

Education Level	Frequency	Percent
Diploma	31	27.92
Degree	62	55.86
Master's degree	18	16.22
Total	111	100.00

From the survey, it indicates that the education is a big issue in most societies as the Diplomas holders were 27.92 percent. This means that the level of skills at management level is not adequate. This confirmed that the SASRA Report 2016 which highlighted the need to enhance the human resource capacity. Inadequate managerial skills and competencies in deposit taking societies has resulted in poor quality financial reporting. The reports cannot assist the regulator to conduct a proper supervision of deposit taking societies. A proper supervision would detect any risk before it happens.

4.3.7 Type of DTSs

The type of deposit taking society showed the variability of financial returns. An agriculture based SACCO is mostly affected by weather conditions whereas others are not. Tea growers SACCOs' performance is influenced by tea prices at world market.

Table 4.12: Profile of Respondents of Deposit Taking SACCOs

Type	Frequency	Percent
Agriculture based	54	48.65
Employer based	24	21.62
Group based	33	29.73
Total	111	100.00

Table 4.12 reveals 48.65 percent of the population were from agriculture-based SACCOs. It is evident from these findings that most of the deposit taking SACCOs are from agricultural zone. The employer-based societies were 21.62 percent of the respondents. These societies were mainly for teachers and civil servants working in Kenya.

4.3.8 Profile of Membership

Membership showed the financial strength of a society. It showed that share capital is at a higher level as compared with small societies. The size of any SACCO is determined by its membership.

Table 4.13: Membership level

Membership	Frequency	Percent
0-15000	65	58.56
16000-50000	25	22.52
>51000	21	18.92
Total	111	100.00

Table 4.13 shows that 58.56 percent of respondents had their members ranging from 0-15000 whereas 22.52 percent represented membership of more than 50000 members. From the survey, it shows that more than half of the societies have their members below 15000. The number of members in a given SACCOs indicates the strength in term of capital base. Active members improve the cash flows of the society thus enhancing liquidity.

4.3.9 Duration SACCOs had been operating as Deposit Taking

To established sound business, the length of time in operation matters a lot. It means that to establish a good customer base business, it takes a great deal of effort and time.

Table 4.14: Years in Deposit Taking Business

Years	Frequency	Percent
0-1	3	2.70
1-5	11	9.91
5-10	97	87.39
Total	111	100.00

Table 4.14 indicates that most of the societies had been in deposit taking business between 5-10 years. This is represented by 87.39 percent of the respondents. The

survey also found out that 9.91 percent had been in deposit taking business between 1-5 years.

4.3.10 Worth of SACCOs

The total assets of a society showed its financial footing. If assets are managed well, the society will benefit from its economic activities. However, if the assets are mismanaged, the society will experience financial distress.

Table 4.15: Total Assets

KShs.	Frequency	Percent
10-30M	0	0.0
31-50M	41	36.94
51-100M	39	27.93
>100M	39	35.13
Total	111	100.00

Table 4.15 presents the financial capital of various societies. The capital was categorised into various ranges**.** The survey showed that majority of the society total assets had more than Kshs.100 million. This represented 35.13 percent of the respondents. All deposit taking SACCO had more than Kshs. 31 million assets in the survey. It is evident from the table that the region is economically sound.

4.3.11 Test of Normality

Multiple regression analysis requires that data should be normally distributed. Skewness and kurtosis statistics were used to test normality. Skewness means lack of symmetry in data distribution. Skewness is categorised into positively and negatively skewed distribution. In a case of positively distribution the mean is greater than mode and median but median lies between the two. In a negatively skewed distribution, mean is less than mode and median. The median lies between

the two parameters. Kurtosis is the peakedness of a curve of a frequency. Normal curves are symmetrical curves where $b_1=0$ and $b_2=3$ and their values decrease symmetrically towards baseline in both the directions but never touch it.

Kurtosis values close to zero indicate that the data shape was close to normal while negative values indicate distributions more flat than normal and positive kurtosis values show shapes peaked than normal. Kurtosis and skewness value of 2 or -2 are sufficient condition for statistical analysis.

Table 4.16 Test of Normality

Variable	N	Min	Max	Mean	Std Dev.	Skewness	Kurtosis
Internal financing	111	2	5	3.847	0.833	0.553	0.178
External financing	111	1	4.67	2.970	1.088	0.015	1.123
Portfolio selection	111	1	4.83	3.236	1.144	0.430	0.867
Credit management	111	2	5	4.106	0.966	0.844	0.461
Risk management	111	3	5	4.246	0.643	0.480	0.7694
Managerial capability	111	2	5	4.219	0.845	-1.127	0.425
Funds allocation	111	1.50	5	3.405	0.913	-0.279	-0.096
Financial pe5rformance	111	1.60	4.87	3.513	0.781	-0.320	-0.226

From the findings, internal financing had a mean of 3.847, standard deviation of 0.833, skewness of -0.553 and kurtosis of -0.178. The values of skewness and kurtosis were within the range 2 and -2. This means that the data are normally distributed. All other variables had their skewness and kurtosis values ranging between 2 and -2 (Cooper & Schindler, 2015). It means that all variables were normally distributed.

4.3.12 Reliability and Validity

Reliability of the instruments was tested using Cronbach's alpha and established the findings as credible. Reliability of data was determined by calculating Cronbach's alpha reliability coefficient for each variable. When the Cronbach alpha is high, it shows high reliability and it means that the measuring instrument is consistent in its measurement. Reliability coefficient of 0.70 is sufficient for research instruments (Field, 2015).

Table 4.17: Cronbach's Alpha

Variable	Cronbach's Alpha	Acceptability
Internal financing	0.989	Acceptable
External financing	0.985	Acceptable
Portfolio selection	0.957	Acceptable
Credit management	0.951	Acceptable
Risk management	0.962	Acceptable
Managerial capability	0.957	Acceptable
Funds allocation strategy	0.966	Acceptable

Source: Author (2017)

From this study, all Cronbach's Alpha values were greater than 0.700. Hence no variables had to be removed. The results from the survey showed that the reliability of the questionnaire used in this study was at an acceptable level and the reliability analysis statistics are shown in the table 4.17.

4.4 Capital Adequacy Framework Variables

This section elaborates the connection between the dependent and independent variables and established the achievement of the study objectives.

4.4.1: Internal Financing

The first objective of the study sought to establish the influence of internal financing on financial performance of deposit taking SACCOs in Kenya.

Table 4.18: Internal Financing

Internal Financing	1	2	3	4	5	Mean	SD
Are member deposits adequate	0	13	25	53	20	3.71	0.803
Maintaining the 15% liquid assets	0	9	42	26	34	3.77	0.963
Embracing internal financing	0	8	27	62	14	3.74	0.595
Insisting on institutional capital	0	10	0	68	33	3.97	0.667
Is share capital adequate	0	14	17	46	34	3.90	0.839

The respondents were required to fill in their views on five questions relating to internal financing. The questions were categorised into (1) strongly disagree (2) disagree (3) neutral (4) agree (5) strongly agree. The respondents were required to rate the agreement or disagreement to various statements in relation to internal financing. A question relating to member deposits was asked to find out if they are adequate. A majority of respondents (53) strongly disagreed that member deposits were not adequate to finance SACCOs' activities. This means SACCOs have to resort to borrowing to ensure that their operations are not disrupted. Using only member deposits will affect financial performance. In case of maintaining 15% of their total assets in liquid assets, 47 respondents were not sure if their societies are doing that. It was also the same to utilising institutional capital in financing their projects. Majority of the respondents (49) were not sure if their societies were using

this kind of capital. From the findings, it also indicated that share capital was not adequate to finance operations of the society. Inadequacy of internal finance affects financial performance of SACCOs. Our confidence that internal financing does affect financial performance is bolstered.

The highest mean score was 3.97. This relates to insisting on institutional capital to finance SACCOs' activities.

4.4.2: External Financing

The second objective was to establish the effect of external financing on performance of DTS in Kenya. The respondents were required to give their views on several statements relating to external financing. The statements were categorised into 5-scale points. The officials were asked if their societies borrowed short term loans, 45 respondents strongly disagreed that they used short term loans to finance their operations. In case of long term loans, majority of respondents (29) agreed that they used long term loans to ensure that their economic activities progress without hindrance. The societies were not borrowing more than 25% of its total capital. The highest mean score was 3.775. This means that societies adhered to external borrowing policy.

Table 4.19: External Financing

External Financing	1	2	3	4	5	Mean	SD
Depending on short-term loans	0	13	25	53	20	3.71	0.803
Depending on long-term loans	0	9	42	26	34	3.77	0.963
External borrowing not more than 25% of its capital	0	8	27	62	14	3.74	0.595

4.4.3: Portfolio Selection

The third objective was to establish the influence of portfolio selection on financial performance of DTS in Kenya. The study therefore sought to ascertain how the societies select their ventures.

Table 4.20: Portfolio Selection

Portfolio selection	1	2	3	4	5	Mean	SD
Depending on external consultant on portfolio selection	22	34	22	33	0	2.595	1.243
Investing in physical assets	12	37	26	31	5	2.819	1.204
Investing in financial assets	4	22	14	35	36	3.694	1.487
Not engaging in prohibited business	14`	0	0	4	93	4.459	1.778
Does financial investment exceed 40% of capital or 5% of total deposit	28	14	28	32	9	2.820	1.730
Investment in non-earning assets should be less than 10% of the total assets in which land and buildings should be less than 5% of the total assets	20	30	16	20	25	3.00	2.091

From the table 4.20 results, it is evident that most of the societies did not engage in prohibited business. Prohibited businesses are illegal. Illegality is costly. Hence, it will affect financial performance adversely. Its mean score was 4.459. The financial investment did not exceed 40% of total capital. It is a legal requirement that SACCOs are not allowed to invest in more 40% of total capital in financial assets. It is evident from the findings that most of the societies outsource financial consultancy. A total of 33 respondents agreed that the societies engaged external consultants in selecting portfolio. This indicates portfolio selection is crucial which need serious consultation.

4.4.4 Credit Management

The fourth purpose was to determine the influence of credit management on financial performance of deposit taking SACCOs in Kenya where participants were asked several questions relating to credit management. The responses were relating to general agreement and disagreement of the statements.

Table 4.21: Credit Management

Credit management	1	2	3	4	5	Mean	SD
Are member credit bureau reference	45	0	12	13	41	3.045	3.243
Insider trading and abuse in self-dealings prohibited	9	3	0	13	86	2.153	6.850
Credit evaluation and analysis before lending out loans	0	0	17	26	68	4.459	0.560
Monitoring and eradicating outstanding loans	0	0	17	43	51	4.306	0.524
Do you insist on collateral security before approving loans	12	20	4	33	42	3.658	1,973
Do you screen and monitor customers	5	8	9	43	46	4.054	1.197
Do you establish long-term relationships with customers	0	0	0	29	82	4.739	0.195

From the table 4.21 results, it is evident that most of the societies established long-term relationships with customers. Its mean score is 4.739. Majority of the respondents agreed that they had to evaluate credit analysis of customers before lending out loans so that loan delinquency could be minimised. Its mean score is 4.459. With prudent credit management, business performance of deposit taking SACCOs would be improved.

4.4.5 Risk Management

The fifth purpose was to elucidate the influence of risk management on financial performance of deposit taking SACCOs in Kenya. Participants were required to give their views relating to minimising risk in the societies.

Table 4.22: Risk Management

Risk management	1	2	3	4	5	Mean	SD
Does loaning policy in place specifically relating to loan concentration limit, term and condition of insider lending	0	0	12	49	50	4.270	0.451
Do you have contingency plan to handle loan defaulters	0	0	17	65	29	4.108	0.406
Do you have aged analysis of arrears by loan purpose	0	0	17	45	49	4.342	0.519

Most of the respondent responses showed that risk was not considered as a vital ingredient. It affects financial performance of deposit taking SACCOs in Kenya. Risk management affects financial performance adversely. Risk can be minimised. However, it cannot be eliminated. Its mean score is 4.342.

4.4.6 Managerial Capability

The sixth objective was to deduce the effect of managerial capability on business performance of DTS in Kenya. According to Armstrong and Taylor (2017), goal theory supports the emphasis in performance management on setting and agreeing objectives against which performance can be measured and managed. The respondents were given various statements relating to capability of employees to handle business processes in the societies. The statements had 5-scale points which are considered with agreement and disagreement of the respondents.

Table 4.23: Managerial Capability

Management capability	1	2	3	4	5	Mean	SD
Do SACCOs have qualified staff	0	0	9	31	71	4.559	0.412
Are research and development in place	9	8	22	41	31	3.694	1.414
Do you embrace financial innovation	0	4	9	36	62	4.405	0.625

From the table results, it is evident that all the societies did not have research and development department. Majority of the respondents (9) strongly disagreed that they did not have such department. The respondents (98) agreed that they embraced financial innovation in their societies. Innovativeness creates effective and efficient business processes. Most of the respondents (102) agreed that they had qualified staff. Qualified staff is a vital asset to a business entity. It influences business performance positively

4.4.7 Funds Allocation Strategy

The seventh purpose of the research was to determine the moderating effect of funds allocation strategy on capital adequacy framework on business performance of deposit taking SACCOs in Kenya.

Table 4.24: Funds Allocation Strategy

Funds Allocation Strategy	1	2	3	4	5	Mean	SD
Do you invest in tactical assets	9	9	60	24	9	3.135	0.936
Do you invest in strategic assets	0	13	32	44	22	3.676	0.857

Table 4.24 results reveal that most of the participants (22) strongly agreed that they invested in strategic assets. Its mean score is 3.676. With capital adequacy framework, strategic assets will improve business performance of DTS in Kenya.

4.4.8 Financial Performance

The study also purposed to establish if the deposit taking SACCOs were using the PEARLS system in measuring their performance. All the respondents were using the system. However, they rated the parameters differently. Balance scorecard is superior as compared with PEARLS. It measures four perspectives including financial return.

Table 4.25: Financial Performance Measures

Financial performance	1	2	3	4	5	Mean	SD
Protection							
Do you have sufficient provision to cover 100% of all loans delinquent for more than 12 months	0	25	22	60	4	3.387	0.767
Do you have sufficient provision to cover 35% of all loans delinquent for 12 months	0	9	31	53	18	3.739	0.694
Effective financial structure							
Do you have potential for growth	0	0	4	42	65	4.730	0.355
Does your financial structure match with earning capacity	0	4	0	67	40	4.288	0.425
Assets quality							
Do you invest in non-productive assets	68	22	12	9	0	1.658	0.882
Are your non-productive assets more than 5% of the total assets	65	17	17	9	3	1.811	1.306
Rate of return							
Is your rate of return more than bank rate	17	0	43	43	8	3.225	1.270
Do your costs range between 3.5-5% of average total assets	4	4	67	22	14	3.342	0.773
Liquidity							
Do you maintain liquid account at a minimum of 20% of the deposits	4	5	43	37	22	3.613	0.949
Do you maintain liquidity reserves at 10% of saving deposits	3	8	39	49	12	3.532	0.779
Is your idle liquidity close to zero	1	20	38	20	20	3.126	1.548
Signs of growth							
Are current total assets more than previous year	0	6	6	54	45	4.243	0.622
Are current loans more than previous year	0	5	14	39	53	4.261	0.722
Is current institution capital more than previous year	0	6	6	45	54	3.324	0.656
Are current members more than previous	0	9	9	35	58	4.279	0.858

Table 4.25 shows financial performance measures and respondent views. In case of protection, the respondents who disagreed were (64) meaning that there was sufficient provision to fully cover all loans delinquent for more than twelve months. It means that if members default in paying their loans then financial performance of deposit taking societies will be affected adversely. Effective financial structure influences financial performance. The respondents were required to give their views on the financial structure mapping with the earning capacity of the societies. The respondents (107) were sure that the societies were matching the earning capacity of SACCOs with financial structure. Assets quality influences financial performance. Assets of substandard quality increases maintenance cost hence lowering financial returns at the end of financial year. However, high quality assets reduce maintenance cost hence improving financial returns of deposit taking societies. Return rate determines the type of projects to undertake. The prevailing rate of return should be compared with bank rate. Where the bank rate is less than rate of return of a given venture, it is advisable to invest in that project. Most participants (29+32) generally agreed that they evaluate rate of return before investing in any project. Liquidity status of deposit taking societies was asked. The respondents (4+5) disagreed that 20% of finances are maintained in liquid form. The respondents also disagreed about the signs of growth in case of total assets and membership. However, in case of growth of loans the respondents (99) agreed that the loan status is compared with previous periods. The six parameters influence business performance of DTS in Kenya.

4.5 Relationship between Capital Adequacy Framework and Financial Performance

Correlation and regression analysis were used to ascertain the connection between the variables of the study. Inferential statistics were used to test the study hypothesis. The level of significance of the study was 5%. The null hypothesis was rejected if the p-value is less than 0.05 and fail to reject if the p-value is more than 0.05 (Field, 2015).

The relationship between the variables internal financing, external financing, portfolio selection, credit management, risk management, managerial capability and financial performance were analysed using correlation analysis (Patton, 2012). In this study, Pearson correlation analysis was used in ascertaining the linear association between the study variables. The correlation coefficient ranges between -1 and 1. A correlation coefficient of +1 indicates the two variables are perfectly positive related whereas a correlation coefficient of-1 shows that the two variables are perfectly negative related. They move in the opposite direction.

4.5.1 Relationship between Internal Financing and Finance Performance

Pearson correlation coefficients show the relationship between internal financing, funds allocation and financial performance.

Table 4.26: Internal financing Correlation

		X_1	Z	Y
X_1	Pearson correlation	1	,460	.402
	Sig.	.000	.000	.000
	N	111	111	111

Key Y=Financial Performance X_1 = Internal Financing, Z = Funds Allocation

The correlation coefficient between internal financing and funds allocation had 0.460 and its p-value of 0.000. This shows existence of a positive and significant connection between internal financing and funds allocation.

The connection between internal financing and financial performance had correlation coefficient of 0.402 and p-value of 0.000. It shows that there was a positive and significant relationship between the two variables. According to Jones (2014), financing portfolio using internal funds improve financial performance of any firm as it will achieve cost efficiency in the operation activities.

4.5.2 Relationship between External Financing and Financial Performance

Pearson correlation coefficient showed the strength of relationship between variables. It shows the relationship among external financing, funds allocation and financial performance.

Table 4.27: External Financing Correlation

		X_2	Z	Y
X_2	Pearson correlation	1	,667	.324
	Sig.	.000	.000	.000
	N	111	111	111

Key Y=Financial Performance X_2 = External Financing, Z = Funds Allocation

From the findings, it is evident that there is a positive and significant relationship between external financing and funds allocation. It was 0.677 and its p-value of 0.000. The relationship between external financing and financial performance was positive and significant. The correlation coefficient was 0.324 and p-.value of 0.000. The result shows that there is positive and significant relationship among external financing, funds allocation and financial performance. Firms allocate funds to provide more capacity with which to supply their products and services. This

enhances financial performance, which further enhances consumer confidence (Lipsey & Chrystal, 2013). According to Pandey (2015), cash analysis is used in determining a firm's debt capacity. Debt capacity is the level where a firm can service easily even under unfavourable conditions. A SACCO should borrow only if it can repay debt without any problem.

4.5.3: Relationship between Portfolio Selection and Financial Performance

The Pearson correlation coefficient between portfolio selection and funds allocation .shows that there exists a positive and significant relationship.

Table 4.28: Portfolio Selection Correlation

		X_3	Z	Y
X_3	Pearson correlation	1	,658	.311
	Sig.	.000	.000	.000
	N	111	111	111

Key Y=Financial Performance X_3 = Portfolio selection, Z = Funds Allocation

The correlation coefficient was 0.658 with p-value of 0.000. The relationship between portfolio selection and financial performance also shows a positive and significant relationship. The correlation coefficient was 0.311 and p-value of 0.000. The stated goals of Portfolio management include: income, growth and stability (Chandra, 2015). It provides a steady stream of income through regular interest and dividend payment. The value of funds invested appreciates. It also embraces diversification of investment which minimises financial risk.

4.5.4 Relationship between Credit Management and Financial Performance

The relationship among variables are measured by pearson correlation coefficient. It shows the level of relationship and its direction.

Table 4.29: Credit Management Correlation

		X_4	Z	Y
X_4	Pearson correlation	1	,285	.724
	Sig.	.000	.000	.000
	N	111	111	111

Key Y=Financial Performance X_4 = Credit management, Z = Funds Allocation

From the findings, there exists a positive and significant relationship between credit management and funds allocation. The correlation coefficient between the two variables was 0.285 and a p-value of 0.000. The relationship between credit management and financial performance was a positive and significant. The correlation coefficient was 0.724 and a p- value of 0.000. Proper assessment of creditworthiness of customers is crucial to reduce credit risk. It facilitates establishment of credit limits (Chandra, 2015).

4.5.5 Relationship between Risk Management and Financial Performance

The pearson correlation coefficient gauges the relationship among variables. It shows the strength of relationship.

Table 4.30: Risk Management Correlation

		X_5	Z	Y
X_5	Pearson correlation	1	,410	.583
	Sig.	.000	.000	.000
	N	111	111	111

Key Y=Financial Performance X_4 = Risk Management, Z = Funds Allocation

The results obtained from the correlation analysis, a positive and significant correlation was established between risk management and funds allocation. It is evident from the outcome that it had a coefficient of 0.410 and a p-value of 0.000. This shows that as risk management increases, funds allocation increases. The

relationship between risk management and financial performance is positive and significant. Its correlation coefficient was 0.583 and p-value of 0.000. This indicates that there is a positive correlation between risk management and financial performance of DTS in Kenya. As risk management increases, financial performance increases. All SACCOs use both equity capital and debt capital. The proportion of debt capital to the total capital determines financial risk. The higher proportion of debt component in the capital structure of a SACCO indicates higher financial risk (Nagarajan & Jayabal, 2012).

4.5.6 Relationship between Managerial Capability and Financial Performance

The relationship between managerial capability and financial performance is shown in table 4.31.

Table 4.31: Managerial Capability Correlation

		X_6	Z	Y
X_6	Pearson correlation	1	,441	.409
	Sig.	.000	.000	.000
	N	111	111	111

The correlation coefficient showed that there is a strong, positive and significant relationship between managerial capability and financial performance. This is shown by the Pearson correlation coefficient of 0.409 and a p-value of 0.000. The relationship between managerial capability and funds allocation was also positive and significant. Their coefficient was 0.441 and p-value was 0.000. All the firms know that the key to competitive advantage in this twenty-one century will be the capacity of top leadership to create, integrate and implement the new-economy virtues of speed and e-commerce with the old-economy virtues of generating profit,

market share and excellent service (Robin & Coulter, 2015). Managers' principal responsibility in leading firms to high performance levels is helping organisation members to make the right choices during periods of portfolio selection or funds allocation.

4.5.7 Relationship between Capital Adequacy Framework, Funds Allocation and Financial Performance

Pearson correlation coefficients indicate the strength of a linear association between two variables. It describes the degree and direction of relationship between two variables. The values of Pearson correlation coefficient range from $1 \leq r \leq -1$

Table 4.32: Pearson Correlation

N=111	Y	X_1	X_2	X_3	X_4	X_5	X_6	Z
Y	1.000							
Sig.								
X_1	0.402	1.000						
Sig.	.000							
X_2	0.324	0.491	1.000					
Sig	.000	.000						
X_3	0.311	0.486	0.673	1.000				
Sig.	.000	.000	.000					
X_{4t}	0.724	0.593	0.300	0.300	1.000			
Sig.	.000	.000	.000	.000				
X_5	0.583	0.352	0.424	0.436	0.651	1.000		
Sig.	.000	.000	.000	.000	.000			
X_5	0.409	0.242	0.415	0.406	0.447	0.608	1.000	
Sig.	.000	.000	.000	.000	.000	.000		
Z	0.348	0.460	0.677	0.658	0.285	0.410	0.441	1.000
Sig.	.000	.000	.000	.000	.000	.000	.000	

Y=Financial performance X_1=Internal financing X_2=External financing X_3=Portfolio selection X_4=Credit management X_5 =Risk management X_6 =Managerial capability

When the value of $r = 1$, it means that the correlation is perfectly positive. The correlation coefficient of negative one shows that the two variables move in the opposite direction. The correlation coefficient of zero means that there is no correlation between the variables. The value of r closer to zero indicates that the relationship between the two variables is not strong. However, if it is closer to one or unity, it indicates a very strong relationship.

According Maligalig & Martinez (2013), correlation coefficient values which ranging 0.100 to 0.290 are considered weak, from 0.300 to 0.490 are considered medium and from 0.500 to 1.000 are considered strong. From the findings, all the two variables were ranging from .500 to 1.000 meaning that they were strongly correlated. They are significant at 5% level significance as all of them had p-values= 0.000.

According to Koutsoyiannis (2014), multicollinearity arises when there exists linear relationships among explanatory variables. If it does not seriously affect the estimates of the coefficients, one may tolerate its presence in the function. However, the integrity of the least squares estimate is to a certain extent impaired. As indicated from the table, all the variables had positive correlations. The correlation between managerial capability and internal financing is weak (r=0.242).

Multicollinearity is tested to establish if some variables are correlated. If two variables are correlated, one is dropped from the study.

Table 4.33: Results of Multi collinearity Tests on Independent Variables

Predictor variables N=111	Tolerance($1-R^2$)	VIF (variances inflation factors)
Internal financing	0.838	1.193
External financing	0.895	1.117
Portfolio selection	0.903	1.107
Credit management	0.476	2.101
Risk management	0.660	1.515
Managerial capability	0.833	1.200
Funds allocation strategy	0.879	1.138

Multicollinearity was tested and results presented in Table 4.33. According to Field (2015), multi-collinearity existence when tolerance value is less than 0.1 and variance inflation factors (VIF) is greater than 10 and hence the values were considered reliable.

4.5.8 Factor Analysis

This was used to summarise the data into a smaller fractions without losing much information. Principal component analysis is related to factor analysis but they are not similar. Regression analysis predicts the value of a dependent variables based on one or more independent variables. However, factor analysis considered all the variables simultaneously. The main objective of factor analysis is to simplify the data and analyse the interrelationships among variables (Field, 2015).

Table 4.34: Factor Correlation Matrix

Factor	**Extraction Value**
Internal financing	0.939
External financing	0.895
Portfolio selection	0.921
Credit management	0.873
Risk management	0.961
Managerial capability	0.926
Funds allocation strategy	0.903

All factors have large correlations. The correlation exists among constructs meaning that there is interrelationship.. Appendix III indicates the values of eigenvalues. Before extraction, SPSS 23 identified 19 factors within the data set. The eigenvalues associated with each factor represents the variance explained by that particular factor. SPSS displays the eigenvalue in terms of the percentage of variance explained. Factor one explains 91.182% of total variance. Other factors explain only small amounts of variance. SPSS extracts all factors with eigenvalues greater than 1 but in this study there is only one factor with eigenvalue greater than one (Ratner, 2015).

Factor analysis analysed the factors that measured internal financing, external financing, portfolio selection, credit management, risk management, managerial capability, funds allocation and financial performance. The results were obtained using by SPSS technique. The factor loading (KMO value) was 0.746. This value is greater than 0.5. Hence the data was considered suitable for analysis and a test of sample adequacy. The Bartlett's test of Sphericity had a p-value less 0.001 which is less than $p< 0.05$. This shows that data are suitable for structure detection and hence the data are appropriate for analysis.

Table 4.35: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.746
Bartlett's Test of Approx. Chi-Square		2341.389
Sphericity	Df	36
Sig	Sig	.000

The test was conducted to ascertain the suitability of data collected from the survey. Table 4.35 shows that KMO measure of sampling was 0.746 which indicated that data was suitability for the study.

4.6 Test of Hypotheses on influence of Capital Adequacy Framework on Financial Performance

The study included 164 deposit-taking societies in Kenya licensed in 2016. Only 111 DTS responded to the survey. The study intended to find the effect of capital adequacy framework on financial performance. The relationship is moderated by funds allocation strategy. The hypotheses were tested at 5% significance level. The results are discussed as follows: Section B questionnaire related to the relationship among independent and dependent variables. The intention was to establish if the independent variables influence financial performance of DTSs. The study established that internal financing, external financing, portfolio selection, credit management, risk management and managerial capability influenced financial performance of DTS in Kenya significantly.

Amongst the factors that are critical on the business performance of DTS in Kenya. They include the following: internal and external financing, portfolio selection, credit management, risk management, managerial capability and funds allocation strategy. A DTS is also in a dangerous position if the non-interest expense is greater than net interest income plus other income. Similarly, the difference in the interest percent of a weighted average of loans and deposits must be correlating. The quality of other income is a concern (Jordan et al., 2018). For example, a DTS may try to generate cash from one-off loan set-ups, just to get the fee, and not bother

themselves with the quality of the loan itself. SASRA has the mandate to license, supervise and monitor DTS. This study established that these factors influenced business performance of DTS in Kenya positively.

Table.4.36: Summary of Hypotheses testing

Objective	Hypothesis	R^2	Status of the hypothesis
To examine the influence of internal financing on financial performance of deposit SACCOs in Kenya	H_{01} Internal financing does not influence financial performance of deposit taking SACCOs in Kenya	0.162	H_{01} not supported
To determine the influence of external financing on financial performance of deposit taking SACCOs in Kenya	H_{02} External financing does not influence financial performance of deposit taking SACCOs in Kenya	0.105	H_{02} not supported
To establish the influence of Portfolio selection on financial performance of deposit taking SACCOs in Kenya	H_{03} Portfolio selection does not influence financial performance of deposit taking SACCOs in Kenya	0.097	H_{03} not supported
To examine the influence of Credit management on financial performance of deposit taking SACCOs in Kenya	H_{04} Credit management does not influence financial performance of deposit taking SACCOs in Kenya	0.524	H_{04} not supported
To assess the influence of Risk management on financial performance of deposit taking SACCOs in Kenya	H_{05} Risk management does not influence financial performance of deposit taking SACCOs in Kenya	0.340	H_{05} not supported
To evaluate the influence of Managerial capability on financial performance of deposit taking SACCOs in Kenya.	H_{06} managerial capability does not influence financial performance of deposit taking SACCOs in Kenya	0.167	H_{06} not supported
To evaluate the moderating effect of funds allocation toward financial performance of deposit taking SACCOs in Kenya.	H_{07} Funds allocation does not moderate capital adequacy framework towards financial performance of deposit taking SACCOs in Kenya.	0.424	H_{07} not supported

Source: Researcher (2018)

4.6.1 Hypothesis one: Internal financing has no significant influence on financial performance of deposit taking SACCOS in Kenya.

The hypothesis was tested to establish if internal financing influences financial performance of deposit taking SACCOs in Kenya. The results are shown in table 4.37.

Table 4.37: Model Summary

Model	R	R^2	Adj R^2	Std error of estimate	Change statistics				
					R^2Change	Fchange	df_1	df_2	Sig.F change
1	.402	.162	.160	.439	.162	1906.166	1	110	.000

The coefficient of correlation (r) between internal financing and financial performance was 0.402 indicating a positive effect of internal financing on financial performance. The coefficient of determination (R^2) of 0.162 indicated that 16.2% variability of financial performance is explained by internal financing. The adjusted R^2 shows how well the model generalises the relationship and its value should be same as, or very close to, the value of R^2. In this model the difference between R^2 and adjusted R^2 is very small (0.162 - 0.160=0.002 or 0.2%). This shrinkage means that if the model was derived from the population rather than a sample it would account for approximately 0.2% less variance in the outcome. It indicates that the cross- validity of this model is very good. The change statistics indicate whether the change in R^2 is significant. The model causes R^2 to change from 0 to 0.162 and this change in the amount of variance explained gives rise to an F-ratio of 521.885 which is significant with a probability less than 0.05.

The analysis of variance is applied to determine predictability of a model.

Table 4.38: ANOVA Test

Model	SS	Df	MS	F	Sig.
1 Regression	63,505	1	63.505	1906.166	.000
Residual	3.631	109	33		
Total	67.136	110			

The outcome of ANOVA for regression coefficient as indicated in the table 4.38 revealed that F=1906.166 and p-value=0.000. It shows that the significance of F is 0.000 which is less than 0.05. It indicates that the regression model statistically significant predicts the outcome variable. Therefore, the model is good for the data. From the findings, it shows that there is a significant relationship between internal financing and financial performance among the deposit taking SACCOs in Kenya.

The hypothesis states that internal financing has no significant effect on business performance of DTS in Kenya.

Table 4.39 : Regression Coefficient Analysis

		Unstandardised Coefficients		Standardised coefficient		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.006	.082		0.660	.000
	Internal Financing	.597	.021	.402	43.660	.000

The findings however reveal that there was a positive significant relationship between internal financing and financial performance (beta=0.402, t=43.660, p-value=0.000). The standardised beta value of internal financing is 0.402. This value shows that as internal financing increases by one standard deviation, financial

performance increases by 0.402 standard deviation. The t-value is 43.660 which is greater than zero, then the null hypothesis that internal financing has no significant influence on financial performance of deposit taking SACCOs in Kenya was rejected and the alternate hypothesis was fail to reject.

In conclusion, internal financing had a positive significant influence on financial performance among deposit taking SACCOs in Kenya. It is evident from the finding that internal financing improves financial performance. The SACCOs should ensure that they increase their institution capital.

The testing of internal financing included five aspects which include the following: members' deposits, equity shares, maintaining 15 percent liquidity of total assets and institutional capital. Members' deposits are money received from members. These are members' savings which can be withdrawn at any time they like. Any deposit-taking societies has to maintain 15 per cent of total assets in liquid form which may be invested in either cash or marketable securities. The analysis was done to find out if internal financing of deposit-taking societies were embracing it or opting for external funding. The aim of either financing is to magnify the financial performance of SACCOs. Institutional capital is non-withdrawable capital of entities (Rouf, 2013). This capital comprises the following: retained earnings and non-interest incomes. The share capital is the money contributed by members as equity shares. It forms a larger amount of assets, as compared with other sources. To test the hypothesis, respondents answered questions relating to the above aspects.

Before a SACCO in need of funds searches for outside funding, it should check its cash flow positions to determine whether any internal funds are available. Inter-borrowing among SACCOs is beneficial because the term of borrowing is

negotiable. This process is especially useful during periods when the cost of obtaining funds in the financial markets is relatively high (Riahi-Belkaoui, 2015). An existing SACCO can raise finances from internal sources additionally for future growth and expansion. Internal sources of financing are retained earnings in the form of balance in profit and loss account, general reserves, capital reserves and depreciation reserves.

A SACCO can keep a portion of the profits it has earned without distributing to the members. A portion of profits reserved in the society is known as retained profits. It is strictly not a method of raising finance but refers to an accumulation of returns which forms institutional capital. If a SACCO continues building institutional capital, it will have a sound financial footing in future. Members will benefit from it because the interest charges will be less. Both members and the society will benefit from internal financing as it will improve the financial performance of the business. This process of retaining the profits year after year and their judicious utilisation in the business is known as ploughing back profits (Brigham & Houston, 2014). The objective of ploughing back the profits is to meet the following society purpose: replacement of old assets which have become outdated, lending loans as well as meeting working capital requirements of society, expansion and growth of an enterprise, making the society self-dependent and avoiding outside financing and redemption of loans and debentures (Richardson, 2012).

The management of the following crucial factors will help an enterprise achieve self-financing. The earning status of an entity plays a critical role in determining the quantum of retained earnings. If the earning capacity of the society is high, retained earnings also can be high. If a society does not have adequate earning capacity, there

is no possibility for retained earnings. The desire and type of members the society has, influence the retained earnings policy. If the majority of the members are retired people, widows and those who look for the dividend as a regular source of benefit. However, preference is made to have a higher figure of income (Gopal, 2012). A society having that category of members cannot afford to retain more amounts in the form of retained earnings. A SACCO that has wealthy members may not mind if the society follows the policy of retained earnings. The future financial requirements of the society affect the strategy of retained profits. If the society has more expansion plans, the need for funds is more. The enterprise would prefer to hold earnings rather than distribute higher dividends. Dividend policy influences retained earnings (Shim & Siegel, Dauber & Qureshi, 2015). If a SACCO wants to declare more dividends, it cannot afford to keep more profits. The dividend policy has a reciprocal relationship with the retention policy (Sharpe et al., 2011). If it holds more profits, the lesser amount of profit would be available for distribution and vice versa. The monetary and fiscal policy of the government influences retained earnings. A high taxation policy of the government leaves the lower amount in the hands of SACCO towards retention of profits. On the contrary, a liberal policy of the government allows more profits for holding in the society. It happens normally when the tax liability is less (Bhalla, 2014).

In conclusion, the internal fund is economical method of financing. Society needs not depend upon outsiders for meeting the requirements of expansion, loan advancing and growth. Profits accumulated would be adequate to meet the requirements for any business opportunities.

4.6.2 Hypothesis two: External financing and financial performance of deposit taking SACCOs in Kenya

The hypothesis was to establish if external financing has influence on financial performance. The results are shown in table 4.40.

Table 4.40: Model Summary

Model	R	R^2	Adjusted R^2	S.E of the estimate	Change Statistics				
					R Square Change	FChange	df1	df2	Sig. F Change
1	.324	.105	.103	.198	.105	1603.824	1	109	.000

The coefficient of correlation (R) between external financing and financial performance was 0.324. This shows that there is a positive correlation between the two variables. The R^2 which is the coefficient of determination explains the amount of variation of financial performance that is related to external financing. The value is 0.105. External financing explains 10.5% variability of financial performance of deposit taking SACCOs in Kenya. The remaining 89.5% is explained by other factors outside the study scope.

The Analysis of Variance for regression coefficient was applied to show the relationship between the two variables at 5% level of significance.

Table 4.41: ANOVA Test

Model		SS	df	MS	F	Sig.
1	Regression	62.864	1	62.864	1603.824	.000
	Residual	4.272	109	.029		
	Total	67.136	110			

The outcome of the Analysis of Variance for regression coefficient shows that the p-value is .000. It is less than.05 level of significance. It is evident from the finding that there is a significant relationship between external financing and financial performance among deposit taking SACCOs in Kenya.

The study hypothesised that external financing has no significant influence on financial performance of deposit taking SACCOs in Kenya. Regression coefficient was applied to test its significance.

Table 4.42: Regression Coefficient

		Unstandardised Coefficients		Standardised coefficient		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.449	.055		26.403	.000
	External Financing	.695	.017	.324	40.048	.000

The results reveal a positive significant relationship between external financing and financial performance. The t-value is 40.048 and p-value less .001. It is a significant predictor of financial performance of deposit taking SACCOs in Kenya. The smaller the value of p-value and the value of t is larger, the greater the contribution of that predictor (Field, 2015). Therefore, if external financing is used judiciously, it will improve financial performance of deposit taking SACCOs in Kenya. Since the t was

40.048, the null hypothesis that external financing has no significant influence on financial performance among deposit taking SACCOs in Kenya was rejected and the alternative hypothesis was not rejected. External financing has positive significance influence on financial performance of DTS in Kenya.

The testing of external funding used three aspects which comprise: short-term debts, long-term debts and borrowing not exceeding 25 percent of total assets. Short-term loans are paid within a one year. The payments of long-term debts take durations which are more than one year. Deposit-taking societies are not allowed to borrow more than 25 percent of total assets. SACCOs procure externally to improve their financial performance. The respondents were asked relevant questions to the above three aspects.

External fund influences the financial performance of a given business enterprise. If the society needs financing, it depends on the operating activities. The larger the payment of cash dividend is done, the greater the amount of financing. It necessitates external borrowing or the sale of equity shares to make operation possible (Gitman, 2011)

To support its investments, a SACCO must devise methods of financing them. Equity and debt represent the two chief sources of funds for business enterprises (Chandra, 2015). Lenders are entitled to a contractual set of cash flows. Borrowers have financial obligations to see to it that loans are paid when loans are due. The cash flows comprise of receipts and payments to the owners with equity investors entitled to residue cash flows remitted to them after all claims and liabilities have

been satisfied (Fabozzi, Modigliani & Jones, 2009). On the contrary, debt investors play a passive role to save their investments, and protect their interests.

SACCOs can also raise long-term finance in addition to equity share and debentures. The funds for financing large expansion, diversification or modernisation projects can be obtained from term-loans. These loans are acquired when the society is intending to finance a real estate venture. This project will take a long time to realise tangible benefit from it. The major advantage of a term loan is that it is for a fixed period. The profit generated from the economics activities facilitates repayment of the instalments. More so, the interest liability is fixed. It means that it does not vary. The profitability of the project does not affect it for a long-term (Chandra, 2015).

SACCOs obtain short-term loans which are usually unsecured from banks and members' deposits. Bank advances and deposits result from actions taken by the society's management and Board of Directors. Bank loans are more common even though the loans are costly. All sizes of enterprises can access loans. Deposits tend to be available only to well-managed SACCOs because depositors would not like to risk their hard-earned cash.

Banks are the chief source of short-term loans which are unsecured to societies. Specifically, the Cooperative Bank of Kenya gives loans to SACCOs so that they may advance to their members. The bank is lender of last resort and offer short-term self-liquidating loans intended merely to carry the business through the seasonal peak in financing needs that meet the members' financial requirements. As the members' financial obligations mature, the funds are generated to retire these loans fully. The utilisation of the borrowed money provides the mechanism of repaying the loan without defaulting. The loan is self-financing. It means that the society

takes loans from banks, and then they are advanced to the members who pay interest and principal. The payments facilitate defraying of the borrowed loans from banks. Banks lend unsecured, short-term funds in three normal ways: through a single-payment note, lines of credit and revolving fund agreements. A financial institution issues a single-payment instrument to a trustworthy business borrower (Nyambere, 2013). It is usually a one-time loan made to a potential borrower who needs funds for financing its activities for short term period. The borrower signs the financial instrument outlining the loan terms including duration of the facility and the interest rates. The note normally has a maturity period of 30 days to nine months or even more than this. The interest charged is usually correlated in some way to the prime rate of interest. Central bank of Kenya set the base rate of interest within the country. It is normally statutory monetary committee policy responsibility.

A line of credit is an agreement between a commercial bank and a society that specifies the amount of unsecured short-term loans it requires. The bank will determine the amount of loan to be lent to the customer. It will be paid over a given period agreed by both parties. It is typically a set of duration for one year and places a certain constraint on the borrowers. The unsecured loan is not easy to obtain but available based on the sufficiency of funds at the bank which often has a maximum amount of line of credit which it allows the society to owe it (Mwatu, 2018).

The borrower applying for a line of credit may be required to submit such documents as its cash budget, its proforma income statement, its proforma balance sheet, and its recent financial statements. If the bank establishes that the financial status of the customer is sound, the line of credit is extended. From the bank's point of view, a line of credit is paramount when making financing decisions. It eliminates

the need to examine the credit worthiness of a customer each time it borrows money within the year (Gitman, 2011).

A revolving credit agreement is a guaranteed line of credit. It is a case where a specified amount of funds is made available to the investor regardless of the scarcity of money. The requirements for this type of credit are akin to those for lines of credit but usually granted for more than a year. As the bank guarantees the availability of funds, a commitment fee is habitually imposed and later applied to the unutilised balance of the borrower's credit line. The charges are routinely about 0.5 percent of the average unused portion of the line.

4.6.3 Hypothesis three: Portfolio selection has no significant influence on financial performance of deposit taking SACCOs in Kenya

Coefficient of determination was applied to test variability of financial performance explained by portfolio selection. The result is shown in table 4.43.

Table 4.43: Model Summary

Model	R	R^2	Adjusted R^2.	S.E of the estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.311	.097	.096	.178	.097	2016.993	1	109	.000

The coefficient of correlation (R) is 0.311 which shows a strong positive relationship between portfolio selection and fiscal performance of deposit taking SACCOs in Kenya. The coefficient of determination (R^2) is 0.097. The R^2 value shows the percentage of variability of financial performance explained by portfolio selection. From the finding it is evident that portfolio selection explains 9.7% variation of financial performance. The remaining 90.3% is explained by other factors. The

difference between R^2 and adjusted R^2 is 0.097-0.096=0.001 or 0.1%. This shrinkage of 0.1% indicates that if models were derived from the population as opposed to the sample this would account for about 0.1% less variances in the outcomes. Hence, the cross-validity of this model is very good and change statistics shows that the F-ratio is 2016.993 which is significant at 5% level of significance.

The analysis of variance was applied in testing relationship between portfolio selection and financial performance.

Table 4.44: ANOVA Test

Model		SS	df	MS	F	Sig.
1	Regression	63.694	1	63.694	2016.993	.000
	Residual	3.442	109	.032		
	Total	67.136	110			

The regression coefficient from ANOVA table revealed that F=2016.993 and p-value =0.000. The significance of F is 0.000 which is less than 0.05. The regression coefficients predict the outcome variable significantly. The finding shows that portfolio selection and business performance among the DTS in Kenya.

The null hypothesis states that portfolio selection has no significant effect on financial performance of deposit taking SACCOs in Kenya.

Table 4.45: Regression Coefficient

Model		Unstandardised Coefficients		Standardised coefficient		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.361	.051		26.796	.000
	Portfolio selection	.665	.015	.974	44.911	.000

The results revealed a positive significant relationship between portfolio selection and business performance (Beta=0.974, t=44.911, p-value=0.000). The standardised value shows the unit changes that occur as a result of one unit change in the predictors. The standardised beta value of portfolio selection is 0.974 indicating that as portfolio selection increases by one unit, financial performance increase by 0.974 units. From the finding, the t-value is 44.911 which is greater than zero, hence the null hypothesis that portfolio selection has no significant influence on financial performance of deposit taking SACCOs in Kenya was rejected.

In conclusion, portfolio selection has a positive significant influence on business performance among DTS in Kenya. Selecting an appropriate portfolio would enhance earnings. DTS should consult investment analyst before selecting their portfolio.

The questions relate to five aspects which affect portfolio selection. These included: physical assets, financial assets, prohibited businesses, investing not exceeding 40 percent of total assets, and non-earning assets. Economic assets include the enumerated as follows: real estate, fuel marketing entity and vehicles. Investment in physical assets is crucial, it generates income to the society. In a case of financial

assets, financial instruments comprise: treasury bills and bonds, equity shares and certificate of deposits (Quayes & Hasan, 2014). The society is not allowed to invest in prohibited businesses, such as speculating, trade in Foreign exchange transactions (FOREX) and gambling, which are highly risky. All investments should not exceed 40 percent of total assets. There is also threshold in investing in non-earning assets. These assets facilitate the operations of SACCOs. The assets include the following: computers, photocopiers, tables and others.

According to Hiriyappa (2015), investors are investing their money in companies with sound financial footings. Investment in various financial instruments like equity, preference shares, deposits, debentures, government or gilt edged securities, bonds, public provident schemes, bank deposits, real estate, money market instruments, precious objects and mutual funds. These investment avenues are known as investment opportunities which are available to investors.

Investment management involves correct decision making of the buying or selling of the securities in the market. Ordinary people cannot invest without consultants' assistance as it is risky. It needs competent and experienced professionals who have been dealing with such cases. Investment management involves decision making at perilous and tough movement in the market. Environmental analysis should be done to avoid wrong investment. The decisions should be thorough so that the society could not lose hard earned money. Any investment which has failed, cannot recover the already incurred costs. So it is prudent to do analysis on the following economic factors: industry and firm analysis. It is crucial to be aware of the market expectations and fluctuations in the secondary market.

The traditional investments take into account security analysis which estimates the advantages and disadvantages of individual investments and portfolio management which focuses on construction and maintenance of a group of investments in order to reduce risk as opposed to increasing returns (Chandra, 2015). Returns are significant factors in determining growth, even though the primary goal of portfolio managers is to achieve desired earning levels by assuming the least possible risk.

Portfolio management purposes to attain maximum returns from a ventures delegated to investment managers to manage requiring such manager to balance variables that underpin good investments. The factors which determine the viability of investment include: liquidity, return and security, intended to achieve the highest returns for the investors (Rouf, 2014). A viable portfolio will enhance financial gains. The systematic development and implementation of an investment strategy are vital activity and involve the process of managing assets and investments. It needs selection, management and evaluation of portfolio.

The objective of portfolio selection includes: stability of principal, income, higher level of income and capital appreciation (Hiriyappa, 2015). Stability of principal connotes a situation where the investor stands no chance of suffering losses on their original principal because of factors such as legislation and the investor's risk attitude

. It is the most conservative portfolio and likely to generate the most modest returns in the long run. When the objective of the society is stability of principal, then the society should invest in appropriate investments such as bank certificates.

In income objective, there are no given prescriptions against period declines in principal value. The earnings from marketable securities are sensitive to interest rate

with a rise in interest rates leading to the fall of the market value of these securities. If the firm sells securities before maturity, it will realise an actual loss. Where income is the intended objective this objective is favourable compared to stability of principal. An appropriate investment includes treasury bonds, treasury bills, corporate bonds and other government agency securities.

The time value of money is a key concept in finance. A shilling today is worth more than an equal number of it at any point in future. Income growth objectives sacrifice some current returns for some purchasing power protection which often involve reduced initial income payout (Srairi & Douissa, 2014). Income improves over time and overtakes those from an income objective. Funds with growth of income as its primary objective often seek to have the annual income increased by at least the prevailing rate of inflation. Growth of cash flow requires some investment in equity securities.

Investors may not be interested in portfolio generating income. The capital appreciation is what they are expecting to attain at a given point of time in future as could be the case of retirees who may receive their pension cheques sufficient to finance their retirement life cycle. Owners of investment portfolio could favour having it continue to grow its value rather than getting additional income from it. When considering interest or dividends, payment of tax has to be taken into account as these are taxable capital gains in Kenya (Hiriyappa, 2015).

Markowitz developed the modern portfolio theory through his analysis framework on the inter linkages between risk and return He used the statistical analysis for measurement of risk and mathematical programming for selection of assets in a

portfolio is an actual technique. A portfolio is expected to yield the highest return for a given level of risk or lowest risk for a given level of earning.

4.6.4 Hypothesis four: Credit management has no significant influence on financial performance of deposit taking SACCOs in Kenya.

Coefficient of determination (R^2) was applied when determining variability of financial performance. Variability is explained by credit management.

Table 4.46: Model Summary

Model	R	R^2	Adjusted R^2.	S.E of the estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.724	.524	.522	.516	.524	799.876	1	109	.000

The coefficient of correlation (R) which is 0.724 shows that there exists a strong significant relationship between credit management and business performance of deposit taking SACCOs in Kenya. The coefficient of determination (R^2) is 0.524. It indicates that credit management explains 52.4% variation of performance of DTS. The remaining 47.6% is explained by other factors. The difference between R^2 and adjusted R^2 explain predictability of the model. Thus 0.524-0.522=0.002 or 0.2% shows that had the model been obtained from the population as opposed to a sample it would account for approximately 0.02% less variance in the model is a good fit. The F-ratio is 799.876 and its p-value is 0.000 at 5% level of significance. The credit management has influence on business performance of DTS in Kenya.

Table 4.47: ANOVA Test

Model		SS	df	MS	F	Sig.
1	Regression	59.084	1	59.084	799.876	.000
	Residual	8.052	109	.074		
	Total	67.136	110			

The ANOVA outcome shows that the value of F= 799.876 and its significance is 0.000 at 5% level of significance. The result indicates that the model can predict the outcome variable. The regression coefficient indicates the change in independent variable and its effect on dependent variable

Table 4.48: Regression Coefficient

		Unstandardised Coefficients		Standardised coefficient		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.399	.113		3.537	.001
	Credit management	.758	.027	.938	28.282	.000

The coefficients of credit management were beta=0.938, t-statistic=28.282 and p-value =0.000 at 5% level of significance. Therefore, the study concluded that the relationship between credit management and business performance is significant. Thus the null hypothesis was rejected and the alternative was not rejected. It was established that there is a relationship between credit management and financial performance. With prudent credit management in DTS in Kenya, it will enhance financial performance.

Credit management ensures that all credits are paid on time to avoid a credit crunch. It involves seven aspects which the firm has to embrace. These include: being a member of Credit Bureau of Reference (CRB), avoiding insider trading, credit evaluation, monitoring and evaluating, collateral security, screening and checking and long-term customer relations. Before lending out loans, society should liaise with credit bureau reference to establish the creditworthiness of a borrower. The firm should assess a potential customer by evaluating, controlling and screening customers. A long-term relationship with customers should be introduced to minimise default risk. Collateral security should be a requirement before lending out the loan. Deposit-taking societies should avoid insider lending.

Most of SACCO funds are utilised to make loans or in purchasing debt securities either of which use the society acts as a creditor and subject to default risk. SACCO credit provision will determine the possibility of overall risk of credit of the portfolio's assets (Skinner, 2014). A SACCO can be exposed to credit risk also if it serves as a guarantor on loans borrowed by other societies. SACCOs must lend loans consistently in order to earn high profit. The payment should be made in full making the principles of adverse selection and moral hazard essential for mitigating credit risks and making fruitful loans.

Adverse selection in loan occurs because loans are lent to those who are most likely to default on their loans. These borrowers who are selected are probable to produce an adverse outcome. Borrowers with very risky investment ventures have much to gain if their ventures are successful. Risky ventures have higher financial returns. Most of the investors prefer them. However, borrowers who are not credit worthy

cannot be advanced any loan. There is greater possibility that the loan may not be repaid in time.

Moral hazard exists in all financial institutions. SACCO is included. Borrowers may have incentives to engage in activities that are undesirable from the lender's point of view. In this scenario, the creditor encounters the hazard of default. Borrowers with great earning expectation would invest in high risk investment projects. These projects will earn a reasonable profit if successful. These high-risk ventures are likely to fail. As a result, the borrowers will not be able to pay back the loans. To make profit, firms must overcome problems such as adverse selection and moral hazard that make loan defaults likely thus necessitating risk management.

Credit risk management is a vital exercise in any financial institution. Prospective borrowers should be evaluated before extending credit to them. It is important to establish creditworthiness of all the customers. It should use credit analysts who would evaluate the credit information of potential borrowers to ascertain their financial status (Saunders, 2017). Evaluation should indicate the probability of the borrower meeting their repayment so that the SACCO can make a decision on granting the loan. Request for credit should be assessed so that it assists in making decision relating to the value of collateral security. In case the borrower default its security will be sold to recover outstanding loan.

Societies should diversify their credits to ensure that their customers are not dependent on a common source of income. For example, a SACCO in a tea growing region that provides consumer loans to farmers is highly susceptible to credit risk. If the tea farmers experience a bad growing season because of poor weather

conditions, the loan repayment will a problem. When a society's loans skew towards an explicit industry, it should attempt to expand its loans into other industries. In this way, if one particular industry experiences weaknesses, loans provided to other trades will be subject to high credit risk even though its advances spread across industries (Madura, 2012).

4.6.5 Hypothesis five: Risk management has no significant influence on financial performance

Correlation analysis was carried out to determine the relationship between risk management and financial performance. The R^2 determines the variability of dependent variable as explained by independent variable. The result of analysis is shown in table 4.49.

Table 4.49: Model Summary

Model	R	R^2	Adjusted R^2.	S.E of the estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.583	.340	.339	.240	.340	1060.124	1	109	.000

The value of R indicates correlation coefficient between risk management and business performance of DTS in Kenya. The R^2 is the coefficient of determination. This value explains the percentage of variation of financial performance. The R^2 is represented by .340 which is the same as 34%. It means that risk management explains 34% variation of business performance of DTS in Kenya. The difference between R^2 and adjusted R^2 is very small and the shrinkage indicates that if the model were derived from the population as opposed to a sample it would

approximately account for (.340- .339=.001 or 0.1%). This indicates a very good cross-validity of this model.

The ANOVA test was applied to ascertain the predictability of the model.

Table 4.50: ANOVA Test

Model		SS	df	MS	F	Sig.
1	Regression	60.877	1	60.877	1060.124	.000
	Residual	6.259	109	.057		
	Total	67.136	110			

The ANOVA table findings revealed that F=1060.124 and p-value =0.000. The p-value shows that it is less than 0.05 level of significance. Thus the regression model predicts the outcome variable.

The null hypothesis states that risk management has no significant influence on performance of deposit taking SACCOs in Kenya.

Table 4.51: Regression Coefficient

		Unstandardised Coefficients		Standardised coefficient		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-1. 399	.153		-9.171	.000
	Risk management	1.157	.036	.952	32.560	.000

It is evident from the findings that there existed a positive significant relationship between risk management and performance (beta =.952, t=32.560 and p-value

=0.000). If there is one unit increase in risk management, financial performance will increase by 0.952 units. The t-value 32.560 is greater than zero. Hence the null hypothesis than risk management has no significant influence on business performance of DTS in Kenya was rejected and the alternative hypothesis was fail to reject.

In conclusion, risk management has positive significant influence on business performance among DTS in Kenya. Minimising risk enhances business performance. SACCOs should minimise risk by diversifying their investments.

The risk is an adverse outcome of expectation. This situation needs foresight so that the negative outcome is avoided or minimised (Schroeck, 2012). Deposit-taking societies should put in place loan policies, contingency plans and aged analysis of credit to manage risk.

Variances are expected in business transactions. Such unpredictability of the future is resultant of the uncertainties associated with the processes that are necessary to achieve planned objectives. The risk is adverse from expected outcome. Financial risks occur in situation where there is an aberration of profitability or outright losses (Pandey, 2015).

The key drivers in managing a SACCO are the risk, capital and return. It gives a linkage with the finance required for carrying out a business. In simple terms, minimum capital required for an enterprise should be such that it can meet the maximum loss that may arise from the firm to avoid bankruptcy (Kumar et al., 2014).

SACCO risks are many and varied. The risk exposures may be one of the following: liquidity, interest, and operational risks. Liquidity risk of SACCOs arises from

funding of long-term assets by short-term liabilities. It results in financing liabilities in a rollover manner. It means that short term liabilities are used to defray long term liabilities. It is referred to as refinancing risk. Financing liquidity risk refers to a situation where the investor is unable to obtain funds to meet cash flows obligations (Olkar, 2013). For SACCOs, funding liquidity risk is crucial. The liquidity risk in SACCOs manifest in different dimensions: to replace net outflows to unanticipated withdrawal or non-renewal of deposits; funding risk and time risk which occurs from the need to compensate for non-receipt of expected inflows of funds when performing assets turn into non-performing assets (Mishkin & Eakins, 2012).

Interest rate risk is an exposure of a financial condition to adverse movements in interest rates and can take different forms including its effect on earnings and economic value of the society (Sharpe et al., 2011). The value of assets and liabilities is taken into account with gaps of mismatch risks arising from holding assets and liabilities comprised of distinct principal amounts, maturity dates and repricing dates. This creates exposure to unexpected changes in the level of market interest rates (Singhvi & Desai, 2013). This scenario can occur when assets maturing in two years at a fixed rate of interest has been funded by a liability maturing in six months. The interest margin would undergo a change after six months, as liability would be repriced up a maturing causing variation in net interest income. Market risk refers to unfavourable deviations of the mark-to-market values of the trading portfolios occasioning, at times, movements in the market during the period of liquidating the transactions (Jones, 2014). Price risk occurs when financial assets are sold at a lower price than expected. It happens when they are disposed before their maturity period. Bond prices and yields are negatively correlated in the security

market. The trading books have positive correlation with price risk. Its creation facilitates profit making out of short-term activities in the rates of interest. Default risk attributable to the possibility of a debtor failing to meet its financial commitments as stipulated in the agreed terms (Gopal, 2012). Counterparty risk is a form of credit risk related to non-performance of the trading partners due to counterparty's refusal or inability to perform and is a transient financial risk associated with trading.

Operational risk refers to loss resultant of insufficient workforce, internal processes and systems or external factors. Its scope is broad including fraud, communication, documentation, competence, model, cultural, external events, legal, regulatory, compliance and system risks (Gallati, 2013). Two of these risks are common in SACCO's operations namely: transaction and compliance risk. Transaction risk arises from, both internal and external fraud, failed business, processes and the inability to maintain business continuity and manage information. Compliance or integrity risk connotes the statutory sanctions, fiscal or repute loss that a society may suffer resultant of its failure to comply with good business practices (Gweyi & Karanja, 2014).

Strategic risk arises from unfavourable business decisions, improper decision implementation, or rigidity to industry changes. This risk is a function of comparability of society's strategic objectives, the resources deployed against these goals and the quality of implementation (Hiriyappa, 2015).

4.6.6 Hypothesis six: Managerial capability has no significant influence on financial performance of deposit taking SACCOs in Kenya

The hypothesis was tested to established if managerial capability had any influence on financial performance. The result is shown in table 4.52.

Table 4.52: Model Summary

Model	R	R^2	Adjusted R^2.	S.E of the estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.409	.167	.166	.288	.167	698.370	1	109	.000

The coefficient of correlation (R) was 0.409. This indicates that there was a sturdy positive correlation between managerial capability and performance of deposit taking SACCOs in Kenya. The coefficient of determination (R^2) was 0.167. This explains the percentage which managerial capability contributed towards financial performance. The variability of performance was attributable to managerial capability to the tune of 16.7%. The remaining percentage (83.3%) was resultant of factors outside the model. The relationship between managerial capability and business performance is significant at 5% level of significance. Since the p-value is 0.000 which is less than 0.05.

The study assessed whether the model significantly predicts the performance of the deposit taking SACCOs in Kenya or not.

Table 4.53: ANOVA Test

Model		SS	df	MS	F	Sig.
1	Regression	58.072	1	58.072	698.370	.000
	Residual	9.064	109	.083		
	Total	67.136	110			

The F-statistics revealed that managerial capability can significantly predict the business performance of the DTS (F=698.370, P=0.000). Therefore, F-value of 698.370 is significant at 0.05 level of significance. It indicated that the managerial capability triggered the variance of DTS' financial performance (Sinkey, 2015). It is evident from the findings that the regression model is statistically significant.

The coefficient of b-value indicates the relationship between managerial capability and financial performance. If the b-value is positive, it indicates positive relationship between the predictor and the outcome confirming that as managerial capability increases so does financial performance increase. The b-value shows the degree to which the predictors affects the outcomes all other predictors held constant.

Table 4.54: Regression Coefficient

		Unstandardised Coefficients		Standardised coefficient		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.115	.140		-.820	.000
	Managerial capability	.860	.033	.930	26.427	.000

Managerial capability has b-value of 0.860. This value indicates that if managerial capability is increased by a unit, performance will be increased by 0.860 units if the effects of other predictors are held constant. Since the t-value (26.427) and b-value 0.860 are significant as the p-value (0.000) is less than 0.05 significance level. Then, it is true only to say that managerial capability is making a significant contribution to the model. The null hypothesis was rejected as managerial capability has a significant influence on performance of DTS in Kenya.

The predictor variables which affect managerial capability include the following: research and development, qualified staff and financial innovation. All business enterprises embrace research and development. It will enhance effectiveness and efficiency in running business operations (Samaha & Dahawy, 2015). Hence, it improves the financial performance of SACCOs. Qualified staff is assets to any economic entities. They minimise wastage of resources. They are also creative and innovative. Financial innovation creates new products and processes in a firm. Deposit-taking societies should embrace it in order to prosper (Kabiru, 2013).

Every manager has to perform management function within a broad framework of business environment that is composed of ever changing variables, factors or forces, both internal and external to the SACCO. These variables are interdependent and interconnected. The ability of a manager to interact effectively with the environment determines the SACCO's survival and growth. The environment comprises various factors (forces, circumstances, conditions or influences) that affect the functioning of the society, and each of the managerial decisions. It offers both opportunities and threats. Business environment refers to the relevant forces that affect managerial

decisions. It mainly includes external and uncontrollable forces like political, legal, macroeconomic, socio-cultural, technological, and competitive forces for which a manager has no control.

Environment diagnosis and analysis are crucial issues in this study of business environment. It involves identifying the type of problem (declining trend of licensed deposit-taking SACCOs) by signs and symptoms. Symptoms are the set of conditions that indicate the existence of a problem. For example, declining trend of licensed deposit-taking societies is a symptom that indicates something is wrong with one or more departments of the SACCOs. Remember that an indication itself is not a problem, but it indicates an existence of a problem. Analysis shows the detailed and systematic study of each aspect related to the SACCO. The analysis depends on diagnosis. It involves dividing an issue into small pieces and examining each piece in detail (Teoh & Hwang, 2014). A manager can suggest action by diagnosing and analysing the business environment. Diagnosis and analysis help to identify the overall health of the society and form the basis for corrective action.

Environment diagnosis and analysis are critical information for a plan. Besides the current environment, the future trends are important for planning. Environment diagnosis should concentrate on finding the factors (problems, opportunities and most critical threats) for the plan about the SACCOs' objectives. It only involves identification of the relevant aspects. Environment analysis is an attempt to study the relevant forces about the SACCOs' internal situation. The analysis aims at the detailed study of the factors comprising the micro economics and macroeconomics environments to show a meaningful picture of the same. It guides the SACCO about

the amount and manner of efforts required to solve the problem. Hence, both diagnosis and analysis are indispensable for formulating a business strategy.

Environment plays a vital role in determining the degrees of success of the SACCO. The SACCO can realise its objectives to the extent the environment favours. It survives and grows by constant interaction with its external environment and dies if it stops interacting. A SACCO has to constantly adjust and readjust with dynamic business cycle by changing and modifying its internal environment. A manager needs to have a thorough understanding of the environmental forces and should be responsive to them. The present of opportunities and threats depends upon the capacity of its internal environment (SACCO's strength) and favourableness of its external environment. It involves response in term of import from and exports to the environment. Diagnosis and analysis help in assessing the SACCO's strengths and weaknesses about the outside forces (Thomas, Nelson & Silver, 2011).

A SACCO enterprise can adopt to its external changes only when it is internally capable and fit. Therefore, it is essential that internal forces constituting SACCO's climate should also be diagnosed and analysed. Internal environment consists of the following factors: resource ability, elementary policies and procedures, SACCO structure, lending forecasting, capital investment, a degree of cooperation among departments and employees' morale and loyalty (Rudani, 2011; Suchman, 2015).

Professionalism relates to formal education and training, and other professional norms. Professional managers indicate suitably qualified, adequately trained, and efficiency oriented competent and sophisticated persons who can strive for excellent performance. Professional etiquette regarding to appearance, professional

knowledge and skills, professional thinking and professional behaviour are crucial assets. Professionally managed SACCO implies that professional norms are put in place. It also strives for excellence in performance. Besides business activities, professional management can also apply to other fields of human activities, like education, politics, government offices and even philanthropic activities.

According to Prasad (Rudani, 2011), seven conditions to professional management has to be considered. First, commitment should insist in defining knowledge and techniques professionally. SACCO should recruit managers with business related training so that it can assist him in making prudent decision making. Second, it should embrace the application of relevant modern management tools and techniques. These tools facilitate judicious utilisation of financial as well as non-financial resources of the society (Thomas, 2009). Third, it should include team approach in managing the firm rather than emphasising personal style, whims, and prejudice. It should embrace teamwork so that it can achieve the intended goals of the society. It can encourage employees to purchase shares so that it can own the firm. Fourth, it should be prepared to accept change management. Fifth, competence rather than birth should be the basis for promotion in the SACCO ladder. Sixth, it should embrace optimisation-oriented decision making to optimise the benefits to the SACCO and its constituents. Seventh, the SACCO should be responsive to the welfare of society and be guided by national policies.

Quality refers to a level of excellence in a given organisation. Its features include: character, beliefs, ethics, mission, aspirations, behaviour and performance of a person. Quality leadership thus relate to how effectively the leader behaves and performs their role. Such performance is determined by the coordinator, staff and

members. The quality of leadership, therefore, depends upon the ability of a leader to ensure propriety and excellence in the conduct and performance of his SACCO, members and self.

The ability of a leader to ensure propriety and excellence in all aspects of responsibility is referred to as total quality leadership which is characterized by successful discharge of leadership role, ethical propriety in selection and pursuit of mission and goals of leadership, ethical and real approach in performance of leadership roles, excellence in optimisation of wellbeing and output of the SACCO, members and leader, propriety in adherence to the socio-economic-moral-legal norms of the society and state, and directives of the controlling authority by the leader, SACCO and members and all round propriety and excellence in the discharge of leadership roles (Bhatti, 2014; UNCTAD, 2014).

The quality of leadership helps a leader to gain and maintain support of the authority in controlling members. Leadership quality enables employees to outmatch competitors and sustain supremacy in leadership. It keeps the confidence and respect of the members. It helps in keeping head high and performing roles with vigour. A leader should, therefore, ensure that performance of activities helps in achieving total quality performance (Willis, 2013). SACCOs should embrace total quality leadership criteria when picking their Board of Directors. Poor leadership has ruined many SACCOs in Kenya. Board of Directors may be elected to a leadership position because of political interference.

In law, there is a separation between the ownership and management of a corporate body. It creates an agency relationship between the managers and the SACCO's members. The directors are the agents of the ordinary membership who are the

principals. The directors are elected by the membership at the Annual General Meeting (AGM). If the performance of the directors is questionable or not satisfactory, the members withdraw their services. The executives' position in the society is that of agents or stewards (Tsamenyi, Enninful & Onmah, 2016). The top management must make decisions consistent with the members' aspiration of wealth maximisation. The directors who are agents must organise the resources of the entity such that the members get maximum returns from the decision made.

Conflict arises because making decisions that maximise the wealth of the members require subordination of management's interests and goals for the overall SACCO goals. In reality, it is not easy to achieve. The directors who on the other hand are employees of the society would want to maximise the benefits from the society (Wambua, 2015). The employees want an attractive salary, to live in luxurious houses paid for by the SACCO, drive expensive cars courtesy of the SACCO's resources. Generally, the societies have most of their commitments cater for all these benefits. Then, the wealth of the members will not be maximised and this is the point of conflict.

Some unscrupulous directors will take advantage of the ignorance of most of the members and abuse office by taking SACCO reserves for their own use. When the society is not performing well financially, particularly as opposed to other SACCOs in the industry, there is a tendency of the members to remove the directors. Unscrupulous executives who know that if re-elected may take away with some of the SACCO's resources and manipulate the books of accounts. The agency problem touches the lenders. Although lenders such as bankers do not have the power to appoint the directors, the Cooperative Act Cap 490 of Kenya laws empowers them

to petition the court to appoint receivers to manage the affairs of the society in case the SACCO is in financial distress. The receivers then act as agents of the lenders. However, to create this relationship the creditor in question must be secured (Naituli, 2011, Unerman, 2014).

According to Naituli (2011), SACCOs must incur agency costs to safeguard their interests in the society. The expenditures are meant to check on the performance of the directors. It actually reports incidences of directors taking advantage of the firm resources for their gains. These costs include; external auditing, forming audit committees, fair remuneration of the directors, and SASRA's supervision, all of which would subject the affairs of the SACCO to light scrutiny.

4.7 Moderated Effect of Capital Adequacy Framework and Financial Performance

Funds allocation strategy was introduced to regression model to establish the moderating effect on capital adequacy framework towards business performance of DTS in Kenya. Any change in the adjusted R squared determines moderating effect. The regression analysis was conducted for each independent variable and the dependent variable to determine the individual moderating influence of each determinant of business performance. The model predicts the outcome from the independent variable, the moderator and the interaction of the two (Field, 2015). According to Mathuya (2016), the change in the coefficient of determination for the interaction variable is positive and significant, then it means the moderating effect exists. The moderation hypothesis is supported.

The hypothesis was tested by regressing each interaction variable with financial performance. The result showed that funds allocation strategy moderate capital adequacy framework towards financial performance. The null hypothesis is rejected. Model 1 is before moderating whereas model 2 is after moderating.

Table 4.55: Model Summary

						Change statistic		
Model		R	R^2	Adj R^2	SE	R^2change	F change	Sig.
1	X_1	0.402	0.162	0.160	0.439	0.162	1906.166	0.000
	X_2	0.324	0.105	0.103	0.198	0.105	1603.824	0.000
	X_3	0.311	0.097	0.96	0.178	0.097	2016.993	0.000
	X_4	0.409	0.167	0.166	0.288	0.167	698.370	0.000
	X_5	0.583	0.340	0.339	0.240	0.340	1060.122	0.000
	X_6	0.724	0.524	0.522	0.516	0.524	799.876	0.000
2	X_1*Z	0.405	0.164	0.162	0.437	0.164	1757.281	0.000
	X_2*Z	0.329	0.108	0.106	0.196	0.108	1468.250	0.000
	X_3*Z.	0.316	0.100	0.109	0.176	0.100	1987.342	0.000
	X_4*Z	0.411	0.169	0.168	0.286	0.169	487.678	0.000
	X_5*Z	0.585	0.342	0.341	0.239	0.342	949.819	0.000
	X_6*Z	0.731	0.534	0.532	0.514	0.534	658.578	0.000

Source : Author(2018)

Regression analysis was carried out to determine the effect of funds allocation strategy on the relationship between capital adequacy framework and the financial performance. The interaction between capital adequacy framework and funds allocation strategy was computed and used in the regression model $Y=\beta_0 + \beta_1 CAF*Z+ \epsilon_i$. Table 4.55 presents the model summary with the results of the moderation analysis on the relationship between capital adequacy framework and financial performance (Waleed, 2014). According to the results, the value of adjusted R^2 improved when the moderating variable was introduced. This indicates

that there is moderating effect on capital adequacy framework towards financial performance.

The ANOVA test was used to ascertain whether the model could significantly predict the performance of the SACCOs in Kenya.

Table 4.56: ANOVA Test

Model		SS	df	MS	F	Sig.
1	Regression	60.522	6	10.087	352.926	.000
	Residual	6.614	104	.064		
	Total	67.136	110			
2	Regression	60.572	7	8.653	301.268	.000
	Residual	6.564	103	.064		
	Total	67.136	110			

The F-statistics reveals that both models can significantly predict the business performance of DTS in Kenya. The values are M_1 (F=594.887 p=.000) and M_2 (F=585.082, p=.000). Therefore, both F-values are significant at 0.05 significance level. These indicated that the independent and moderating variables triggered the variance of financial performance of DTS in Kenya. The F-values also indicate that the regression model is statistically significant.

Multiple regression was applied to establish the change in independent variable and its effect on dependent variable.

Table:4.57: Multiple regression

	Unstandardised Coefficients		Standardised Coefficients		
Model	B	Std.Error	Beta	t	sig.
(Constant)	.207*	.218		.950	.001
X_1	.042*	.061	.068	.690	.000
X_2	-.164*	.182	-.376	-.905	.000
X_3	.185*	.123	.430	1.391	.000
X_4	.049*	.056	.092	.880	.000
X_5	.119*	.068	.213	1.760	.001
X_6	.272*	.047	.646	5.881	.003

Dependent Variable: *-Sig.p<0.05

The table 4.57 shows parameters of the models. The first model has parameters relating to capital adequacy framework. The multiple regression of the first model has several unknown parameters. These are b-values of the model. These b-values indicate the individual contribution of each predictor to the model. When the b-values are replaced in the equation, it gives a specific model (moderated). FP $=b_0$ $+b_1$ internal financing$*$Z$+b_2$ external financing$*$Z $+b_3$ portfolio selection$*$Z$+b_4$ credit management$*$Z $+b_5$ risk management$*$Z $+b_6$ managerial capability$*$Z+ error term. The b-values indicate the relationship between financial performance and each predictor. Positive values, indicate that there is a positive relationship between the predictor and the outcome with a negative relationship representing the converse (Rovai, Baker & Ponton, 2014). Five predictors had positive b-values meaning that they have positive relationships. Only one predictor had negative b-value indicating negative relationships. Internal financing$*$Z (b= 0.0354): indicating that increase in internal financing by one unit increases financial performance 0.0354 units if effects of other predictors remain constant. External financing$*$Z (b= -0.358): indicating that increases in external financing by one unit decrease financial performance by 0.358

units where effects of other predictors remain constant. Portfolio selection∗Z (b=0.0225): indicating that a unit increase in portfolio selection increases financial performance by 0.0225 units. It is only true if the effects of other predictors are held constant. Credit management∗Z (b=0.0759): indicating a unit increase in credit management increases financial performance by 0.0759 units the effects of other predictors remain constant. Risk management∗Z (b=0.0488): indicating that a unit increase in risk management increases financial performance by 0.0488 units if the effects of other predictors are constant. Managerial capability∗Z (b=0.0820): indicating that an increase in managerial capability by one unit, increases financial performance by 0.0820 units if the effects of other predictors are constant.

The regression coefficient b-values measure the interaction effect between capital adequacy framework and moderating variable (Z). The regression coefficient b measures simple effects of capital adequacy framework when the value of Z=0 that is there is no interaction effects involved. The test of moderation is operationalised by the product term CAF∗Z. In order to test the moderation in a model, one needs to test b-value of interaction term (CAF∗Z). If b-value is significant, then one could conclude that moderator variable Z moderates the relationship between capital adequacy framework and business performance.

The table 4.57 presents un-standardised coefficients, the standardised beta coefficients and t-test values which were used to test significance of the variables. The model indicates that the intercept is .207. This means that if all independent variables are zero then the fiscal performance of the DTS will be 0.207. The B-values indicate the level of change of financial performance when the independent variables change. When one unit increases of internal financing (X_1), financial

performance will increase by .042 unit. However, in case of external financing(X_2) the financial performance will decrease by .164 unit. The model is expressed as below.

$Y=0.207+0.042X_1 – 0.164X_2 +0.185\ X_3 +0.049X_4 +0.119X_5 +0.272X_6+e_i$

The interaction effects of capital adequacy framework and funds allocation towards financial performance. Table 4.57 presents the result of interaction effects of the variables.

Table 4.58: Coefficients for Interaction Effects of Capital Adequacy Framework on Financial Performance

Interaction effect	b	se	t	Sig.
InterF∗ Z	.0354*	.0169	2.0972	.0003
ExterF∗Z	-.0358*	.0137	-2.6193	.0001
PortS∗Z	.0225*	.0117	1.9168	.0009
CreMa∗Z	.0759*	.0159	4.4866	.0000
Risk∗Z	.0488*	.0222	2.1994	.0000
ManaCa∗Z	.0820*	.0229	3.5949	.0005

InterF=Internal financing, ExterF=External financing, PortS=Portfolio selection, ManaCa= Managerial capability, CreMa= Credit management and Risk=Risk management
*-Sig. p<0.05

According to the findings, five independent variables (InterF, PortS, ManaCa, CreMa and Risk) were positively moderated by FAS. External financing had a negative coefficient meaning that it reduces financial performance. All independent variables were significant. The findings implied that the null hypothesis that the funds allocation did not moderate the relationship between capital adequacy

framework and business performance of DTS in Kenya was therefore rejected. The findings support the proposition held by Kinyuira, Gatenya and Muturi (2014) that funds allocation enhance financial performance.

In the second model, it shows that movement of b-values did not change but the magnitudes change. Funds allocation strategy (Z) moderated the effect of independent variables on DTS financial performance. Internal financing embraced building up institutional capital within the DTS. It is believed that this type of capital will save the societies from external financing which is extremely expensive. External financing attracted high interest rate which drained the societies' earnings. Some societies have been delicensed because of over borrowing. These societies had problems in managing financial resources of the societies. Most of the managers did not have business related qualifications which could have assisted them in making prudent portfolio selection. Investments were done haphazardly. Some societies invested in unviable projects, these projects were later sold at a lower price resulting in capital loss. Fraud was also common in various societies. The internal control system in these deposit-taking SACCOs is poor. It needs improvement so that the financial resources of members are safeguarded. Audit department should recruit qualified auditors so that they could instil reliable internal control system.

Funds allocation strategy was a moderating variable (Thuo, Muturi & Njeru, 2013). The predictor variables were tactical and strategic assets. With adequate capital, both financial and non-financial, the business performance of deposit-taking societies is improved. Resources are invested in tactical as well as strategic assets prudently. Funds allocation encompasses many investment activities in assets and securities. They are dynamic and flexible operations. The objective of this service is to help

investors when selecting securities. The process of funds allocation involves a logical set of steps common to any decision regarding planning stage, implementing stage and monitoring and controlling stage (Hampton, 2013). The planning stage is the most important element of proper funds allocation. This involves a careful review in conducting the investor's financial situation and current primary and secondary conditions. In the planning stage the following activities need to be taken into consideration namely; investor conditions, market conditions, investment policies and strategic allocation. Investor conditions measure regarding the financial situation as marketable as non-marketable assets and liabilities, knowledge of the fund's allocation and risk tolerance of the portfolio. This stage involves identifying investor aspirations, conditions and problems of the business situation in marketable and non-marketable assets (Gitman, 2011). The investor must know financial status fully. The society's knowledge of various securities also has an impact on the primary and secondary market. The investor must be aware that yearly equity returns are quite variable, short-term returns on bonds. Finally, the investor considers risk of losing financial return.

Market conditions in terms of short-term expectations and long term expectations. In long-term expectations involved in the portfolio's strategic asset allocation differs from the short-term asset allocation. According to Sharpe et al., (2011), strategic asset allocation refers to how a portfolio's funds would be shared among various sectors. Portfolio manager's long term forecasts of expected returns, variances and co-variances guide allocation. Tactical asset allocation refers to how these funds are shared at any particular moment, given the investor's short term forecasts. Hence, the former reflects what the portfolio manager would do for long–term, and the latter

mirrors what he or she would do under current market conditions. Market conditions tie to inflation and consumption of investment.

Investor policies are specified in terms of allocating assets strategically, speculative strategy and internal or external management. Investor makes decisions regarding assets. Asset allocation refers to the percentage invested in various securities such as money market investment, fixed income obligations, financial instruments, economic investment and financial investments (Viru, 2014). Investors estimate risk from the securities and portfolio of the current scenario. After the investor has determined a current strategic asset allocation and decided how to rebalance the allocation passively with the value of assets changing with time as do occur variations in prices of shares (Kumar et al., 2014). A decision is made as to the types and amount of security speculation which will be allowed.

Implementation stage is the most important element of prudent investments and speculation in portfolio. This involves a careful selection of securities investment in different sectors such as industry, service and agriculture. The implementation stage comprises rebalancing strategic and tactical allocation of assets and security selection. Rebalance strategic asset allocation involves asset mix to the desired level called for in strategic asset allocation. If investors believe that the price levels of certain assets like industries or economic sectors are temporarily too high or too low, actual portfolio holdings should depart from the asset mix (Madura, 2012). It should invest in the strategic asset allocation. Tactical asset allocation should be embraced instead of strategic asset allocation. Security selection involves speculation involving selection of securities within given asset classes, industries or economic sectors. Thus strategic asset allocation policies would require securities in the asset

class. Monitoring and controlling stage is the last one in the fund's allocation process which consists of monitoring and controlling portfolio returns to determine the speculative decisions seem to be adding value to the portfolio and to ascertain that the portfolio's objective and constraints are being met and have not changed (Hiriyappa, 2015).

4.8 Financial Performance of Deposit Taking-Sacco Societies

The deposit-taking SACCOs in Kenya are rated using Capital adequacy, Asset quality, Earnings and Liquidity (CAEL), though WOCCU recommends PEARLS system. The rating shows the solidity, soundness, safety and general performance of DTS Society monthly and quarterly.

4.8.1 Capital Adequacy Requirements

The Sacco Societies Act requires DTS to consistently maintain the prescribed minimum core capital of not less than Kshs.10 million. Besides prescribed capital adequacy ratios of core capital to total assets, core capital to total deposits and institutional capital to total assets of 10%, 8% and 8% respectively.

Table 4.59: Aggregate Compliance with Capital adequacy as at 2017

Financial soundness indicators	Prescribed minimum	2017	2016	2015
Capital adequacy				
Core capital(millions)	10	64,254	54,943	41712
Core capital/Total Assets	10%	14.53%	13.96%	12.17%
Capital/Total Deposits	8%	21.05%	20.16%	17.57%
Institutional capital/ Total assets	8%	8.18%	7.71%	8.75%

Table 4.59 shows the aggregate compliance with Capital adequacy as at 2017.

The composition of core capital includes: membership shares, reserves, retained earnings and donations. According to SASRA report, it shows that deposit taking SACCOs met prescribed minimum requirement marginally. The percentage of total assets for 2017, 2016 and 2015 are 8.18%, 7.71% and 8.75% respectively. The result showed that in 2016 the percentage was below the prescribed minimum. Institutional capital is internal financing. It shows that internal financing is not adequate. It needs to be enhanced. The aggregate analysis shows that there is an increasing trend in core capital. In 2015, core capital was Kshs.41.712 billion whereas in 2017 it was Kshs.64.254 billion. There was an increase of Kshs.22.542 billion of core capital.

4.8.2 Assets and Assets' Quality

Assets and its quality determine financial results of a firm as poor quality assets increase maintenance cost. SACCOs should procure high quality assets so that financial returns can be sustainable. Questionable receivables cannot be realised.

Table 4.60: Composition of the total asset base of deposit- taking SACCOs

Parameter	2017		2016		2015	
	Amount KShs. Million	% to total assets	Amount KShs. Million	% to Total assets	Amount KShs. million	% to Total assets

Cash and Cash Equivalent	39,622	8.96%	33,722	8.57%	29330	8.55%
Prepayments and Sundry Receivables	30,155	6.82%	19,373	4.92%	19029	5.55%
Financial Investments	20,860	4.72%	15,077	3.83%	20585	6.00%
Net Loan Portfolio	320494	72.46%	288,921	73.42%	251,080	73.23%
Property and Equipment and other Assets	31,146	7.04%	36,405	9.25%	22,824	6.66%
Total Assets	**442,277**		**393,498**		**342,848**	

SASRA report 2017

In 2017, assets portfolio within DTS sector was Kshs.442.27. This amount includes loans amounting to Kshs.320.49 billion representing 72.46% of the total assets portfolio. In 2016, loans to total assets was represented by 73.42%. It shows that there was a decrease of 0.96%. From the SASRA report, it indicates that loans are the main assets and hence business activity of SACCOs in Kenya. The cash and cash equivalent ratio to total assets showed that there was an improvement. In 2015, the ratio was 8.55% and it rises to 8.96% in 2017. It indicates that there is good liquidity in the SACCO sector. Financial investments in the sector increased from Kshs.15.077 billion in 2016 to Kshs.20.860 billion in 2017. It indicates an increase from 3.83% to 4.72% between 2016 and 2017.

4.8.3 Loans and the quality of loan assets

The SACCO Societies regulations 2010 provides for classification of credit and advances by deposit-taking SACCOs. The societies report to SASRA on quarterly basis. It is an off-site surveillance tools. Table 4.61 shows the aggregate assessment and classification of the performance of loans and advances issued by deposit-taking SACCOs in 2015, 2016 and 2017.

Table 4.61: Aggregate risk assessment and classification of loans

			2017		2016		2015	
	Prescribed Minimum	No of account	Gross Loans (KShs. million)	% to Totals	Gross Loans (KShs. million)	% to Totals	Gross Loans (KShs. million)	% to Totals
Performing	1%	1,527,393	294,359	88.87%	263,505	89.19%	226,434	87.68%
Watch (1-30 days)	5%	108,304	16,502	4.98%	18,525	5.59%	18,612	7.21%
Substandard (31-180 days)	25%	77,869	9,964	3.01%	8,050	2.63%	6,813	2.64%
Doubtful (181-360 days)	50%	48,839	4,918	1.48%	3,288	1.11%	2,804	1.09%
Loss (over 360 days)	100%	93,270	5,468	1.65%	4,236	1.48%	3,601	1.39%
Grand Totals		**1,855,675**	**331,212**		**297,604**		**258,264**	
NPL			21,000		14,567		13,218	
Provisions			14,640		10,788		9,901	
Provisions/Grand Loan			4.42%		3.62%		3.83%	
Portfolio at risk (NPL/Gross loans)			6.34%		4.89%		5.12%	

Source: SASRA report 2017

From table 4.61, 88.87% of the loan portfolio in the deposit-taking SACCOs was performing per contract terms . It shows healthy aggregate loan book. In 2016 the percentage was higher than 2017.It was 89.19% of the total loan portfolio. The decline resulted in higher non-performing loan portfolio. It increases from 4.89% to 6.34% in 2017 which is higher than the recommended industry average of 5%.

4.8.4 Financial Investments

SACCOs invest their financial resources in strategic and tactical assets with expectation of earnings at a given period in future. A list of financial investments are shown in table 4.57.

Table 4.62: Distribution of investments

Type	2017	2016
Government securities	2%	1%
Other securities	9%	13.1%
Balances with other SACCOs	50%	44%
Investments in companies	39%	41.9%
Total	**100%**	**100%**

Source: SASRA Report 2017

From table 4.62, it shows that SACCOs have low interest in investing in government securities. In 2016 SACCOs invested in government securities a proportion of 1% of total financial investments. There was a minimal increase in 2017. The proportion is 2% of total financial investments. Investment in government securities enhances liquidity levels within the sector. Investments in companies indicated a decline from 41.9% in 2016 to 39% in 2017 indicating that there was insignificant investment activity in equities and stock of other business entities in 2017.

4.8.5 Earnings

Preparation of the statement of comprehensive income on a monthly basis is mandatory. It is an off-site analysis returns which the Authority required to determine the CAEL. It is applied for rating of SACCOs. Table4.63. indicates the aggregated statement of comprehensive income for the period ended December 2017.

Table 4.63: Aggregate Statement of Comprehensive Income as at Dec.2017

PERFORMANCE ITEMS	2017 (KShs Millions)	% of Total Income	2016 (KShs Millions)	% of Total Income	Y-to-Y Change	2015 (KShs Millions)
Income from loans	52,651	83.51%	46,865	84.81%	12.35%	41,789
Income from Investments	2,159	3.42%	1,925	3.48%	12.15%	1,679
Other Incomes	8,235	13.06%	6,468	11.70%	27.32%	4,752
TOTAL INCOME	**63,045**		**55,258**		**14.09%**	**48,220**
Interest Expense on Deposits	20,906	33.16%	20,520	37.14%	1.88%	17,985
Cost of External Borrowings	2,966	4.70%	2,285	4.13%	29.80%	2,765
Other Financial Expense	1,492	2.37%	1,111	2.01%	34.27%	977
Net Financial Income	**37,681**		**31,342**	**20.23%**		**26,493**
Provision for Loan Losses	2,283	3.62%	2,208	4.00%	3.39%	183
Operating Expenses	23,400	37.12%	20,266	36.67%	15.47%	18,116
Net Income before Tax	**11,998**		**8,868**	**35.30%**		**8,194**
Taxes and Donations	771	1.22%	888	1.61%	-13.18%	520
Net Income after Tax	**11,227**	**17.8%**	**7,981**	**14.44%**	**40.67%**	**7,674**

Source: SASRA Report 2017

The total income for DTS in 2016 was Kshs.55.25 billion. However, it increases to Kshs.63.045 billion in 2017.The main source of income was income from loans. Its contribution represented 83.51% of the total income in 2017. However, there was an aggregate decline from 84.81% of total income that comprised incomes from loans in 2016. Incomes from investments to total income also indicated a marginal decrease from 3.48% in 2016 to 3.42% in 2017.

4.8.6 Liquidity

Section 30 of the Act and Regulation 13(2) of the Regulations 2010 require SACCOs to maintain a minimum of fifteen (15%) percent of its savings deposits and short-term liabilities in liquid assets. Table4.58 shows the aggregate level of compliance with the statutory liquidity ratios.

Table 4.64 : Comparative aggregate liquidity levels of DT-SACCOs

Liquidity Ratio		2017	2016	2015
Liquid Assets/Savings Deposits and STLs (Liquidity Ratio)	>=15%	54.10%	49.95%	55.90%
Liquid Assets/Total Deposits		17.17%	18.05%	17.21%
External Borrowings/Total Assets	<=25%	4.83%	5.04%	5.21%
Liquid Assets/Total Assets		11.85%	12.49%	11.93%
Total Loans/Total Deposits		108.49%	108.39%	108.80%

*STLs – Short—Term Liabilities :SASRA report 2017

It is evident from the table 4.64 that liquidity of deposit-taking SACCOs in 2017 was very high. It was 54.1% as compared with 49.95% in 2016. Even though the liquidity was high, the total number of deposit-taking SACCOs that comply with the statutory provisions reduced from 165 in 2016 to 147 in 2017.

Table 4.65: Distribution of compliance with liquidity ratio

Liquidity ratio	2017	2016	2015
Below 5%	8	4	6
Between 5% and 15%	19	6	8
Above 15%	147	165	163
Total	174	175	177

SASRA report 2017

Table 4.65 shows the level of compliance by individual deposit-taking SACCOs with the liquidity ratio. The SACCOs with liquidity level of below five percent were eight in 2017. There was an increase of four SACCOs from 2016 that reported liquidity ratio of below five percent. SASRA continues to execute its monitoring mandate over deposit-taking SACCOs, in accordance with the law.

4.8.8 Property and Equipment & Other Assets

There was a decline in investment in properties, equipment and other asset portfolios from KShs 36.4 billion, KShs 31.1 billion in 2016 and 2017, which represented 9.25% and 7.04% of the total assets portfolio respectively. Table 4.66 shows the investments in property, equipment and other assets. It is evident from data analysis that on aggregate, deposit-taking SACCOs are focused on the core business of savings and lending.

Table 4.66: Composition of Property, Equipment and Other Assets Portfolio

	2017		2016			2015
Parameter	**Amount KShs. Million**	**% of total PPE**	**Amount KShs. Million**	**% of total PPE**	**Y-to-Y Change**	**Amount KShs. Million**
Investment Properties	5,813	18.67%	7,335	20.15%	-20.75%	4,452
Property and Equipment	17,404	55.88%	14,412	39.59%	20.76%	12,590
Prepaid lease rentals	756	2.43%	314	0.86%	140.65%	466
Intangible Assets	1,679	5.39%	1,563	4.29%	7.43%	806
Other Assets	5,494	17.64%	12,781	35.11%	-57.02%	4,510
TOTALS	**31,146**	**100%**	**36,405**			**22,824**

SASRA report 2017

The remarkable change reported is the decline in other assets portfolio. In 2016, other assets portfolio was KShs. 12.781 billion but in 2017 the portfolio fell to Kshs.5.494 billion. This is in line with the SASRA's vision from 2016 encouraging deposit-taking SACCOs to reduce investments in other assets. Classification of other assets in their financial statements will encourage fraudulent activities. Financial crisis in 2007-08 was caused by real estate investment in United State of America.

4.8.9 External Borrowing

According to Sacco Societies Act 2008, deposit-taking SACCOs are required to maintain an external borrowing to total assets ratio of not more than 25% at any time.

Table 4.67: Trends in external borrowing ratio

Ratio	**2017**	**2016**	**2015**	**2014**
External borrowing	4.83%	5.04%	5.21%	6.43%

Table 4.67 shows that the external borrowing to total assets ratio improved from 6.43% in 2014 to 4.83% in 2017 revealing that more deposit-taking SACCOs are internally financing their operations and business activities. However, the gains made were eroded by the increase in aggregate cost of borrowing from 4.13% in 2016 to 4.70% in 2017.

Table 4.67 shows the trend in the external borrowing ratio over the last four years. In 2014 the ratio was the highest. It was 6.43%. However, it started declining since. The Authority mandate remains to ensure that deposit-taking SACCOs maintain their levels of external borrowing to minimum level to avoid financial distress.

Table 4.68: Level of compliance with external borrowing

Level of external borrowing	**2017**	**2016**	**2015**
Below 10%	133	132	126
Between 10% and 25%	32	34	35
Above 25%	9	9	16
Total	**174**	**175**	**177**

Table 4.68 shows compliance levels with external borrowing ratio by individual deposit-taking SACCOs in 2017. It is evident from the analysis that majority of SACCOs (133) maintained their external borrowing ratio at below 10%.

4.8.10 Chief Executive Officers of Deposit-taking SACCOs

SASRA Annual report 2017 indicated the academic qualifications of various CEO. Table 4.69 presents details of the qualifications.

Table 4.70: Highest academic qualifications attained by CEOs of SACCOs

Certificate	2017
PhD	2
Masters Degree	63
Bachelors Degree	71
Diploma	15
Certificates	11
Undisclosed	12
Total	**174**

SASRA report 2017

Majority of chief executives hold Bachelors degrees in the deposit-taking SACCOs. During the year 2017, there were 71 Chief Executive Officers holding Bachelors degrees qualifications; whereas 63 Chief Executive Officers held Masters' degree qualifications; and 2 Chief Executive Officers had doctorate degrees as their highest academic qualifications. The Chief Executive Officers holding Diploma or Certificates were 26. The academic qualifications of 12 others were not disclosed.

4.8.11 Trends in Growth performance of Deposit- taking SACCOs

Assets, deposits, loans, member share capital, reserves and membership are vital tools used to monitor changes in DTS. The number of deposit taking SACCOs included in the report are licensed and restricted SACCOs.

Table 4.71: Key trends in growth parameters of deposit-taking SACCOs as at 2016

Parameter	2016	2015	Y-TO-Y GROWTH %
Number of DT-SACCOS	176	177	-0.6%
Active membership	3,143,485	2,675,050	17.5%
Dormant membership	489,112	466,911	4.8%
Total Membership	**3,632,597**	**3,145,565**	**15.6%**
FINANCIALS*	**KSHS MILLIONS**		**KSHS MILLIONS**
Assets	393,499	342,848	14.8%
Deposits	272,579	237,440	14.8%
Gross Loans	297,604	258,183	15.3%
Allowance for loans Loss	8,683	7,103	22.2%
Net Loans & Advance	288,921	251,080	15.1%
Capital and Reserves	61,261	50,835	20.5%
Core Capital	54,943	41,712	31.7%

The Financials relates to 175 DT-SACCOs only and excludes financials for Taqwa Sacco Society Ltd.

Though the total membership and active membership grew by 15.6% and 17.5% respectively, there was a decline in the number of operating deposit-taking SACCOs partly attributed to the revoking of the licenses of two DTS in June of 2016. Table 4.65 shows an analysis of the trends in the main growth parameters of deposit-taking SACCOs in 2016, derived from approved financial statements of the deposit-taking SACCOs.

The results show that the DTS system recorded collective growth in all key growth measurement parameters. The total assets grew by 14.8% to KShs 393. 49 billion in 2016, up from KShs 342.84 billion recorded in the previous year.

The total deposits also grew to reach KShs 272.57 billion in 2016 up from KShs 237.44 billion in 2015; while the gross and net loans' portfolio grew by 15.3% and

15.1% respectively over the same period to stand at KShs 297.6 billion and KShs 288.92 billion respectively.

4.9 Discussion of Findings

The purpose of the study was to identify whether capital adequacy framework has had any effect on the DTS in Kenya. Out of 164 DTS in Kenya, 111+12 returned questionnaires. This represented 75% of response rate. Most of the societies had been in operation between five and ten years. It represented 77.48% of all respondents.

Respondents were asked about their academic certificates. The answers showed that most of the respondents were degree holders which represented 44.14%. The explanation given for this was that most employees were not motivated to develop themselves academically. This had slow down the growth of SACCOs and also the financial performance (Frosdick, 2015). On inquiry if capital adequacy framework has had any effect on the financial performance, there was general positive response with most respondents acknowledging that external financing and funds allocation strategy had affected financial performance adversely. The reasons for the adversity included: high interest rate, misappropriation of funds and misallocation of funds. Two SACCOs had invested in unviable projects. Eventually, the projects were sold to repay outstanding loans.

Coefficient of determinations of the independent variables indicated that the findings cannot be generalised because the remaining percentages were attributable to other factors which were not part of the study. Basing on the findings of the predictor model from the analysis, the study found out that there existed a significant

relationship between capital adequacy framework and financial performance indicators. The study therefore concludes that capital adequacy framework do have effect on the SACCO financial performance as shown by the predictor model. The coefficient of determinations of moderated model increased for all independent variables. This shows that funds allocation moderated capital adequacy framework towards financial performance of deposit taking SACCOs in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarises the research, findings, conclusion drawn, the recommendations and the implication of the findings. The overall objective of the study was to evaluate the influence of capital adequacy framework on business performance among DTS in Kenya. Specifically, the study sought to establish the influence of internal financing on financial performance of deposit taking SACCOS in Kenya, to determine the influence of external financing on financial performance of deposit taking SACCOS in Kenya, to establish the influence of portfolio selection on financial performance of deposit taking SACCOS in Kenya, to evaluate the influence of credit management on financial performance of deposit taking SACCOS in Kenya, to evaluate the influence of risk management on financial performance of deposit taking SACCOS in Kenya and to determine the influence of managerial capability on financial performance of deposit taking SACCOS in Kenya. The study also sought to establish the moderating effect of funds allocation on capital adequacy framework towards financial performance of deposit taking SACCOs in Kenya.

5.2 Summary of the Study Findings

The questionnaire was used to collect views from the officials of 111 DTSs in Kenya. Various methods were used when analysing data. The main objective was to establish the effect of capital adequacy framework, funds allocation strategy and

financial performance of DTSs. The findings from the study and implications are expounded as follows;

5.2.1 The Influence of Internal Financing on the Financial Performance

The study sought to establish the moderating effect on internal financing towards financial performance of deposit taking SACCOs. From the findings, it indicates that b-value of 0.0354 of moderated internal financing influence financial performance. When one unit of internal financing increases, it means that financial performance will increase by 0.0354 unit at 5% level of significance. The p-value was 0.0003 which is less than 0.05. The influence of moderated internal financing on financial performance is significant. Hence, the null hypothesis was rejected. Internal financing of most of DTSs were very weak. There is a growing need to enhance institutional capital. SACCOs' own capital is very low. The priority of DTSs should be to build institutional capital and postpone investing in real estates. The study found out that internal financing influence financial performance of SACCOs. The objective of the study had been achieved.

5.2.2 The influence of External Financing on Financial Performance

The study found that external financing influenced financial performance negatively. The b-value was -0.0358 at 5% level of significance. It means that as external financing increases by one unit the financial performance decreases by 0.0358 unit.

External financing was being embraced by majority of societies (Epstien & Freedman, 2014). This source of finance is extremely expensive. Servicing of debt had eroded earnings of the societies. This has resulted in low financial performance of the societies. Financial institutions charged between 15-18 percent on the

borrowed loan majority of the DTSs were undercapitalised. They did not meet the loan demand of their members.

5.2.3 The Influence of portfolio selection on Financial Performance

The study sought to examine the contribution of portfolio selection on financial performance. Using multiple regression, the b-value of moderated portfolio selection had a value of 0.0225 at 5% level of significance. It indicated that portfolio selection influenced financial performance positively. Portfolio selection needs competent managers to select appropriate portfolio. Most of the employees were not degree holders. Hence, it will result in poor judgement of business opportunities in the market. Majority of DTSs invested their funds in strategic assets.

5.2.4 The Influence of Credit Management on Financial Performance

The study found out that moderated credit management influenced financial performance positively. Based on multiple regression, it showed that the b-value was 0.0759 at 5% level of significance. This means that as credit management increases by one unit then the financial performance increases by 0.0759 unit. Credit management is very important to all financial institutions. It ensures that all the loans are paid back to the society (Bitner & Goddard, 2014). Credit evaluation should be done before advancing any loan to the members. In addition, screening should be done and the five Cs of credit analysis of the potential borrowers should also be carried out.

5.2.5 The Contribution of Risk Management on Financial Performance

The study sought to examine the contribution of risk management on the financial performance of deposit taking societies. The moderated risk management had beta value of 0.0488 at 5% level of significance. The p-value was 0.000 which indicated

that the variable was significant. It was less than p=0.05. Risk management is attempting to reduce risk exposure to the society (Bini, Dainelli & Giunta, 2015). This is done by systemically identifying, assessing and managing the various risks encountered by Saccos. Default risk is the main risk faced by the societies. This is reduced by creating transparency in disseminating information to the guarantors.

5.2.6 The Contribution of Managerial Capability on Financial Performance

The study sought to examine the contribution of managerial capability towards financial performance of deposit taking SACCOs. Using multiple regression, the moderated managerial capability influenced financial performance. Its b-value was 0.0820 at 5% level of significance. It showed that the variable was an important determinant of financial performance in SACCOs. This implied that one unit increase in managerial capability increased the financial performance in SACCOs by 0.0820 unit.

Managerial capability is the ability to manage and control resources of the society judiciously. Resources are scarce. There is need to manage them effectively and efficiently for the benefit of the members at large. Societies should employ competent staff in order to manage the scarce resources. From the study, it indicated that some of the employees do not have degree certificates. Deposit taking subsector is poorly supervised and regulated, with uncoordinated supervisory frameworks. Most of the supervision was done by county staff which mean that the operations are politically influenced by politicians. This has resulted in mismanagement of Sacco's funds (Al-Tamimi & Al-Mazrooei, 2016). The study found out that funds allocation strategy was favouring strategic assets. Some of these investments were

not viable. Most of the investment in strategic assets are eventually sold. This indicates that SACCOs are not taking into account the profitability of their investments. Societies invest in strategic assets with hidden agenda. The study established that there was a positive and significant relationship between financial performance and capital adequacy framework. It shows that implementation of moderated capital adequacy framework and funds allocation influenced variation in the financial performance. Table 5.1 shows a summary of findings.

Table.5.1: Summary of findings

Objective	Conclusion	Recommendation
To examine the influence of internal financing on financial performance of deposit taking SACCOs in Kenya.	Internal financing was very weak	Enhancing institutional capital and postponing real estate investment
To determine the influence of external financing on financial performance of deposit taking SACCOs in Kenya.	External financing is expensive	Borrowing should be matched with cashflows
To establish the influence of portfolio selection on financial performance of deposit taking SACCOs in Kenya.	Majority of SACCOs invested in strategic assets	Competent managers should be engaged
To examine the influence of credit management on financial performance of loan deposit taking SACCOs in Kenya.	It is a vital factor to be considered when lending credit.	Credit evaluation should be done before advancing any loan
To assess the influence of risk management on financial performance of deposit taking SACCOs in Kenya.	Risk should be minimised	Diversification of investment to spread risk
To evaluate the influence of managerial capability on financial performance of deposit taking SACCOs in Kenya.	It is the driver of SACCOs	Employ qualified and competent staff
To evaluate the moderating effect of funds allocation towards financial performance of deposit taking SACCOs in Kenya.	It moderated independent variables	Funds should be allocated prudently

Source: Researcher (2018)

5.3 Conclusion

From the findings, the study concluded that capital adequacy framework and fund allocation strategy had an impact on the financial performance of DTSs in the study area. Moreover, the researcher can conclude that most of DTSs had problems in financing their operations. The societies borrowed mostly from commercial banks.

This venture is expensive. Consequently, it reduces the society earnings. The researcher can also conclude that the introduction of deposit taking business had improved the provision of financial services in the rural areas. The researcher also concludes that the withdrawal of license of various SACCOs in the counties is due to mismanagement and misappropriation of funds. A case in point is Bomet County where two DTSs were delicensed by SASRA. The study, further conclude that managerial capability is inadequate. From the findings, it was evident that the diploma holders were 27.92% whereas the degree holders were 55.86%. This indicates that managerial skills are very low in the DTSs. Low managerial skills resulted in misallocation of resources which was witnessed in some of the DTS. Finally, it was evident that there existed a positive significant relationship between the level of financial performance and managerial capability which was b=0.0820. There existed a positive relationship between portfolio selection and level of financial performance which was b=0.0225, even though it was the least.

The study concluded that funds allocation strategy has moderating effect on the relationship between capital adequacy framework and financial performance. Therefore, deposit taking SACCOs should embrace prudent funds allocation strategy to ensure that high level of financial returns is realised.

The study finally concluded that capital adequacy framework has significant effect on financial performance among deposit taking societies. Hence, as capital adequacy framework is enhanced, then financial performance of deposit taking societies will improve. High financial returns are the ultimate goal but if SACCOs ignore capital

adequacy framework then their effort may be futile. A well-managed society will attain high financial gains.

5.4 Recommendations

The research report focused on the capital adequacy framework, funds allocation strategy and financial performance of DTSs. Developing capital adequacy framework require a comprehensive and coordinated approach. Proposed capital adequacy framework should address all pertinent issues so as to attain the desired results.

This study recommends that deposit taking SACCOs in Kenya should enhance institutional capital as they significantly affect financial performance. Deposit-taking societies experienced low capitalisation. It is a major constraint within the sector. Internal finances are not sufficient whereas external finances are available but expensive. The SACCOs should be encouraged to mobilise savings and deposits from members. To be successful, the DTSs should be trustworthy and transparent. Members cannot save or deposit their money in a doubtful society. The government should find a way of raising external capital (Al-Tamimi, 2012). It can do this by creating a fund which will cater for SACCOs. This fund can be accessed by the society to meet their financial obligations. This initiative will be useful to the groups. If internal finance is adequate and the SACCO expects financial performance to increase then it should consider increasing internal funds. However, if it is inadequate and the SACCO expects financial performance to increase then it should consider increasing funds

The study recommends that deposit taking SACCOs in Kenya should use external finance with care. In case external finance is adequate and the SACCO expects financial performance to increase (decrease) it should match external funds with cash flow. However, if it is inadequate and it expects financial performance to increase (decrease) the SACCOs should consider increasing external funds (remaining unchanged). Short term loans should not be used to finance long term projects. Long term projects take a long duration to commence generating cash inflows.

The study recommends that deposit taking SACCOs in Kenya embrace prudent portfolio selection to avoid investing in unviable ventures. When portfolio selection is adequate and the SACCO expects financial performance to increase (decrease), then it should remain unchanged (match external funds with cash flows). In contrast, that is, when the portfolio selection is inadequate and the SACCO expects financial performance to increase (decrease), then it should consider increasing external funds (remaining unchanged).

The study recommends that SACCOs should continue with capacity building by training existing staff and also recruiting competent staffs. The government should liaise with universities so that they can create programmes which assist in the development of the enterprise.

Advanced technology should be adopted by societies so that cost efficiency and effectiveness in their operations can be achieved. This will enhance their earnings accruing to members. When the managerial capability is adequate and the SACCO expects financial performance to increase (decrease) then it should consider remaining unchanged (recruiting professional managers). In case it is inadequate and

the Society expects financial performance to increase (decrease), then it should consider recruiting professional managers (remaining unchanged).

The study further recommends that DTS incorporate good credit management practices. A well-managed credit system enhances financial performance. Credit risk will be minimal. If the SACCO's credit management is adequate and it expects financial performance to increase (decrease), then it should consider remaining unchanged (tightening credit policies). In contrary, that is when the portfolio selection is inadequate and the SACCO expects financial performance to increase (decrease). It should consider tightening credit policies (remaining unchanged) (Ademba, 2013).

The study recommends that the SACCOs should have good risk management policies. Loan policy should be in place specifically those policies relating to loan concentration limits, term and condition of insider lending. Contingency plan should be in place to handle loan defaulters and emergency cases.

If the SACCO's risk management is adequate and it expects financial performance to increase (decrease) then it should consider remaining unchanged (enhancing risk management efforts). However, in case of inadequate risk management and the SACCO expect financial performance to increase (decrease). It should consider enhancing risk management efforts (remaining unchanged).

The study recommends that funds allocation should be carried out in a manner that financial returns are taken into account. When the funds allocation strategy is adequate and the SACCO expects financial performance to increase (decrease) then it should consider remaining unchanged (embracing prudent funds allocation strategy). Inadequate funds allocation strategy will force SACCO to consider

embracing prudent funds allocation strategy (remaining unchanged), if it expects financial performance to increase (decrease) (Altman, 2016).

The study finally recommends that PEARLS system should be embraced by all deposit taking SACCOs in Kenya. The system takes into account financial aspects in managing SACCOs. However, other aspects have to be considered. Balance Scorecard is a good measure of performance. It should be embraced by all the SACCOs in Kenya.

5.5 Suggestions for Further Research.

The study focused on financial and non-financial factors influencing financial performance of deposit taking SACCOs. Recommendation for further research was suggested on the effect of the following; technology, improved business processes, culture of the organisation and operation management. From available literature, there is not any study on these areas. The effects of the macro-economic factors on the financial performance of the SACCOs need to be looked into. The macro-economic factors include: real GDP growth, inflation, taxation and the exchange rate fluctuations.

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APPENDICES

Appendix I: Letter of Introduction

John C. Ngeno
Box122
Silibwet.

Dear Sir/Madam,

I am completing my PhD in Kenya Methodist University in Banking and Finance, part of which involves completing a dissertation. My research consists of an evaluation of the capital adequacy framework, funds allocation strategy and financial performance of deposit-taking Saccos in south rift region. My supervisor is Professor George K. Kingoriah.

For the purpose of my research I am conducting a survey on twenty three deposit taking Sacco's in South rift region regarding their strategies on prudent financial management practices to attain reasonable financial returns. Enclosed is a copy of my survey. Due to time constraints on the dissertation, I would be very grateful if you could answer the survey and return same in the prepaid envelope by the 30thof September 2016. The responses will be kept strictly confidential and anonymous. They will be used for academic research; no person or Sacco's will be identified.

As soon as the dissertation is completed there will be an opportunity to disseminate the findings to those that participated in the research. This research will have a more practical value to all the Sacco's in Kenya and the findings can be implemented in order to improve the financial performance in each Sacco's.

Thanking you in advance for your cooperation and time.

Yours sincerely,

John C. Ngeno
PhD Banking and Finance student
Email: johncngeno@gmail.com
Mobile: 0714896556

Appendix II: Questionnaire

Section A: General information

1. Name of the Sacco……

2 What is your gender?
Male
Female

3 What is your age bracket?

20-25 years
26-30 years
31-35 years
36-40 years
41-45 years
46- 50 years
51-55 years
56-60 years

4 How long have been working with SACCO?

0-5 years
6-10 years
11 years and above

5 Can you please state your position in the SACCO?

C.E.O ☐
Finance manager ☐
Credit officer ☐

6 How many years has the SACCO been operating as a deposit lending SACCO?

0-1 ☐ 1-5 ☐ 5-10 ☐

7 What is the current total number of members currently?

0-15,000 ☐ 16,000 – 50,000 ☐ > 51,000 ☐

8 Who are your members?

Agriculture based ☐ Employer based ☐ Group Based ☐

9 What is the current worth of the firm (KShs? Million)?

10-30M ☐ 31-50M ☐ 51-100M ☐ >100M ☐

10 How many branches does the Sacco have?

……

11 What are your qualifications?

Diploma ☐
Degree ☐
Master's degree ☐

Section B: Capital Adequacy Framework and Funds Allocation Strategy

State the agreement to the following statements regarding the capital adequacy framework and funds allocation strategy in relation to your co-operation. Use a scale of 1 to 5, where 1= strongly disagree,2=disagree, 3= not sure,4= agree and 5= strongly agree. Tick the appropriate space.

No	Capital adequacy framework	1	2	3	4	5
	Internal financing					
12.	Are member deposits adequate?					
13.	Maintaining the 15% liquidity assets					
15.	Embracing internal financing					
16.	Insisting on institutional capital growth.					
17.	Is share capital adequate?					
	External financing					
18.	Depending on short-term loan.					
19.	Depending on long-term loan.					
20.	Borrowing more than 25% of its capital					
	Portfolio selection					
21.	Depending on external consultants on portfolio selection					
22.	Investing in physical assets					
23.	Investing in financial assets					
24.	Not engaging in prohibited businesses					
25.	Does financial investment exceed 40% of capital or 5% of total deposits?					
26.	Investment in non-earning assets should be less than 10% of the					

No	Capital adequacy framework	1	2	3	4	5
	total assets in which land and building should be less than 5% of the total assets.					
	Managerial capability					
27.	Do SACCOs have qualified staff?					
28.	Does research and development in place?					
29.	Do you embrace financial innovation?					
	Credit management					
30.	Are you a member of credit Bureau reference					
31.	Insider trading and abusive self-dealings are prohibited					
32.	Credit evaluation and analysis before lending out funds.					
33.	Monitoring and eradicating outstanding loans.					
34.	Do you insist on collateral security before approving loans?					
35.	Do you screen and monitor customers?					
36.	Do establish long-term relationships with customers?					
	Risk management					
37.	Does loaning policy in place specifically relating to loan concentration limit, terms and condition of insider lending					
38	Do you have contingency plan to handle loan defaulters					
39	Do you have aged analysis of Arrears by loan purpose?					
	Funds allocation strategy					
40	Do you invest in tactical assets?					
41	Do you invest in strategic assets?					

42. Which investment enhances financial performance?

Tactical assets ☐
Strategic assets ☐

43. Do you face any challenges in meeting the above functions?

Yes ☐ No ☐

If yes, enumerate the challenges.

……
……
……
……
……
……
……

44. Does the Sacco have strategies to put in place to address the above challenges?

Yes ☐ No ☐

If yes, list the strategies

……
……
……
……
……
……
……

45. What business opportunities have you missed due to the above challenges?

……
……
……

Section C: Financial Performance Measures

This section is concerned with assessing financial performance measures of the deposit taking SACCOs in Kenya. Tick in the box which best describe your agreement and disagreement.

Effects of financial performance measures	1	2	3	4	5
1. Protections:					
1.1. Do you have sufficient provisions to cover 100% of all loans delinquent for more than 12 months?					
1.2. Do you have sufficient provisions to cover 35% of all loans delinquent for 1-12 months?					
2. Effective financial structure:					
2.1 Do you have potential for growth?					
2.2 Does your financial structure matches with earning capacity?					
3. Asset quality:					
3.1 Do you invest in non-productive assets?					
3.2 Are your non-productive assets more than 5% of total assets?					
4.Rates of return:					
4.1 Does your rate of return more than bank rate?					
4.2 Do your costs range between 3.5-5% of average total assets?					
5.Liquidity:					
5.1 Do you maintain liquid account at a minimum of 20% of the deposit saving?					
5.2 Do you maintain liquidity reserves at 10% of saving deposits?					
5.3 Does your idle liquidity close to zero?					
6.Signs of growth:					
6.1 Do current total assets more than previous year?					
6.2 Do current loans deposits more than previous year?					
6.3 Does current institutional capital more than previous year?					
6.4 Do current members more than previous year?					

With the introduction of deposit taking business of Sacco's, has there been a change in terms of how the society is run?

Yes ☐ No ☐

If yes, has the deposit taking business led to enhance funds availability for investment?

Yes ☐ No ☐

If no, what can be attributed to the problem?

……
……
……
……
……

How can this problem be address to ensure that the intension of enhanced funds availability is achieved?

……
……
……
……
……

What business opportunities have been created by the deposit taking business?

……
……
……
……

Do you have any cases of corruption, mismanagement and misappropriation of funds by some elected officials for the last 4 years?

Yes ☐ No ☐

How many cases?

None ☐ 1 – 5 cases ☐ 6 – 10 cases ☐ over 10 cases ☐

Do you consider professional when electing board/committee members?

Yes ☐ No ☐

Appendix III: Factor Analysis Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared loadings		
	Total	% of variants	Cumulative %	% Total	% of variants	Cumulative %
1	20.060	91.182	91.182	20.060	91.182	91.182
2	.506	2.299	93.481			
3	.401	1.823	95.304			
4	.216	.983	96.287			
5	.190	.865	97.153			
6	.135	0.614	97.767			
7	.118	0.534	98.301			
8	.075	0.340	98.641			
9	.057	0.260	98.901			
10	.052	0.236	99.137			
11	.041	0.185	99.322			
12	.032	0.146	99.468			
13	.026	0.120	99.588			
14	.022	0.101	99.689			
15	.021	0.094	99.783			
16	.016	0.073	99.856			
17	.015	0.070	99.927			
18	.009	0.040	99.967			
19	.007	0.033	100.00			
20						
21						

Appendix IV: Communalities

	Commonalities	
	Initial	**Extraction**
Protection loan security	1.000	.742
Financial performance	1.000	.915
Asset quality	1.000	.917
Rate of returns	1.000	.892
Liquidity	1.000	.872
Signs of growth	1.000	.898
Loan policy	1.000	.960
Contingency plan	1.000	.952
Debt analysis	1.000	.956
Funds allocation strategy	1.000	.903
Strategic assets	1.000	.881
Credit management	1.000	.873
Monitoring and minimising	1.000	.766
Outstanding loans	1.000	.892
Establishing customer relationship	1.000	.939
Internal financing	1.000	.895
External financing	1.000	.921
Portfolio selection	1.000	.926
Managerial capability	1.000	.961
Risk management	1.000	1.000
REGR factor score1 for analysis 1	1.000	.999
REGR factor score1 for analysis 2	1.000	1.000
REGR factor score1 for analysis 3	1.000	1.000

Extraction Method: Principal Component Analysis

Appendix V: Descriptive Statistics

Variable	N	Mean	Std. Deviation
Internal Financing	111	3.31	1.575
External Financing	111	3.95	1.007
Portfolio Selection	111	3.31	1.324
Credit Management	111	3.77	1.148
Risk Management	111	2.92	1.446
Managerial Capability	111	3.00	1.344
Funds Allocation Strategy	111	3.96	.852

Appendix VI: Respondents of Deposit-Taking Sacco Business in Kenya

NO	NAME OF SOCIETY	POSTAL ADRESS
1.	BANANA MATATU SACCO SOCIETY LTD	P.O BOX 333-00219 NAIROBI.
2	BARATON UNIVERSITY SACCO SOCIETY LTD	P.O BOX 2500-30100 ELDORET.
3.	BIASHARA SACCO SOCIETY LTD	P.O BOX 1895-10100 NYERI.
4.	BORESHA SACCO SOCIETY LTD	P.O BOX 80-20103 ELDAMA RAVINE.
5.	CAPITAL SACOO SOCIETY LTY	P.O BOX 1479-602OO MERU.
6.	CENTENARY SACCO LTD	P.O BOX 12O7-60200 MERU.
7.	CHAI SACCO LTD	P.O BOX 278-00200 NAIROBI.
8.	CHUNA SACCO SOCIETY LTD	P.O BOX 30197-00100 NAIROBI.
9.	COSMOPOLITAN SACCO LTD	P.O BOX 1931-20100 NAKURU.
10.	COUNTY SACCO SOCIETY LDT	P.O BOX 21-60103 RUNYENJES.
11.	DAIMA SACCO SOCIETY LTD	P.O BOX 2032-60100 EMBU
12.	DIMKES SACCO LTD	P.O BOX 886-00900 KIAMBU.
13.	DUMISHA SACCO LTD	P.O BOX 84-20600 MARALAL.
14.	EGERTON SACCO SOCIETY LTD	P.O BOX 178-20115 EGERTON.
15.	ELGON TEACHERS SACCO SOCIETY LTD	P.O BOX 27-50203 KAPSOKWONY.
16.	ELIMU SACCO SOCIETY LTD	P.O BOX 10073-00100 NAIROBI.
17	ENEA SACCO SOCIETY LTD	P.O BOX 1836 101O1 KARATINA.
18.	FARIDI SACCO SOCIETY LTD	P.O BOX 448-50400 BUSIA.
19	FORTUNE SACCO SOCIETY LTD	P.O BOX 559-10300 KERUGOYA.
20.	FUNDILIMA SACCO SOCIETY LTD	P.O BOX 62000-00200 NAIROBI.
21.	GASTAMECO SACCO SOCIETY LTD	P.O BOX 189-60101 MANYATTA.
22.	GUSII MWALIMU SACCO SOCIETY LTD	P.O BOX 1335-40200 KISII
23.	HARAMBE SACCO SOCIETY LTD	P.O BOX 47815-00100 NAIROBI.
24.	HAZINA SACCO SOCIETY LTD	P.O BOX 59877-00200 NAIROBI.
25	IG SACCO SOCIETY LTD	P.O BOX 1150-50100 KAKAMEGA

26.	ILIKISONGO SACCO SOCIETY LTD	P.O BOX 91-00209 LOITOKITOK.
27.	IMARISHA SACCO SOCIETY LTD	P.O BOX 682-20200 KERICHO.
28.	IMENTI SACCO SOCIETY LTD	P.0 BOX 3192-60200 MERU.
29.	JAMII SACCO SOCIETY LTD	P.O BOX 57929-NAIROBI.
30.	JITEGEMEE SACCO SOCIETY LTD	P.O BOX 86937-80100 MOMBASA.
31.	JUMUIKA SACCO SOCIETY LTD	P.O BOX 14-40112 AWASI.
32.	KAIMOSI SACCO SOCIETY LTD	P.O BOX 153-50305 SIRWA.
33.	KATHERA RURAL SACCO SOCIETY LTD	P.O BOX 250-60202 NKUBU.
34.	KENPIPE SACCO SOCIETY LTD	P.O B0X 314-00507 NAIROBI.
35.	KENVERSITY SACCO SOCIETY	P.O BOX 10263-00100 NAIROBI.
36.	KENYA ACHIVAS SACCO SOCIETY LTD	P.O BOX 3080-40200 KISII.
37.	KENYA BANKERS SACCO SOCIETY LTD	P.O BOX 73236-00200 NAIROBI.
38.	KENYA HIGHLANDS SACCO SOCIETY LTD	P.O BOX 2085-002000 KERICHO.
39.	KENYA MIDLAND SACCCO SOCIETY LTD	P.O BOX 287-20400 BOMET.
40.	KENYA POLICE STAFF SACCO SOCIETY LTD	P.O BOX 51042-00200 NAIROBI.
41.	KIMBILIO DAIMA SACCO SOCIETY LTD	P.O BOX 81-20225 KIMULOT.
42.	KIPSIGIS EDIS SACCO SOCIETY LTD	P.O BOX 228 20400 B0MET.
43.	KITE SACCO SOCIETY LTD	P.O BOX 2073-40100 KISUMU.
44.	KOLENGE TEA SACCO SOCIETY LTD	P.O BOX 291-30301 NANDI HILLS.
45.	KONOIN SACCO SOCIETY LTD	P.O BOX 84-20403 MOGOGOSIEK.
46.	KORU SACCO SOCIETY LTD	P.O BOX PRIVATE BAG-40100 KORU.
47.	KWALE SACCO SOCIETY LTD	P.O BOX 123-80403 KWALE.
48.	KWETU SACCO SOCIETY LTD	P.O BOX 818-90100 MACHAKOS.
49.	K-UNITY SACCO SOCIETY LTD	P.O BOX 268-00900 KIAMBU.
50.	LAMU TEACHERS SACCO SOCIETY LTD	P.O BOX 110-80500 LAMU.

51.	MAFANIKIO SACCO SOCIETY LTD	P.O BOX 86515-80100 MOMBASA.
52.	MAGADI SACCO SOCIETY LTD	P.O BOX 13-00205 MAGADI.
53.	MAGEREZA SACCO SOCIETY LTD	P.O BOX 53131-OO2O0 NAIROBI
54.	MAISHA BORA SACCO SOCIETY LTD	P.O BOX 30062-00100 NAIROBI.
55.	MARSABIT TEACHERS SACCO SOCIETY LTD	P.O BOX 90-60500 MARSABIT.
56.	MENTOR SACCO SOCIETY LTD	P.O BOX 789-10200 MURANGA.
57	METROPOLITAN NATIONAL SACCO SOCIETY LTD	P.O BOX 871-00900 KIAMBU.
58.	MMH SACCO SOCIETY LTD	P.O BOX 469-MAUA
59.	MOMBASA PORT SACCO SOCIETY LTD	P.O BOX 95372-80104 MOMBASA.
60	MUDETE TEA GROWERS SACCO SOCIETY LTD	P.O BOX 221-50104 KAKAMEGA.
61.	OLLIN SACCO SOCIETY LTD	P.O BOX 83-IO300 KERUGOYA.
62	MUKI SACCO SOCIETY LTD	PO BOX 398-20318 NORTH KINANGOP
63	ASILIL SACCO SOCIETY LTD	PO BOX 4906-OOIOO NAIROBI
64.	MURATA SACCO SOCIETY LTD	P.O BOX 816-10200 MURANGA.
65.	MWALIMU NATIONAL SACCO SOCIETY LTD	P.O BOX 62641-00200 NAIROBI.
66.	MWIETHERI SACCO SOCIETY LTD	P.O BOX 2445-060100 EMBU.
67.	MWINGI MWALIMU SACCO SOCIETY LTD	P.O BOX 489-90400 MWINGI.
68.	MUKI SACCO SOCIETY LTD	P.O BOX 398-20318 NORTH KINANGOP.
69	MWITO SACCO SOCIETY LTD	P.O BOX 56763-00200 NAIROBI.
70.	2NK SACCO SOCIETY LTD	P.O BOX 12196-10100 NYERI.
71.	NACICO SACCO SOCIETY LTD	P.O BOX 34525-00100 NAIROBI.
72.	NAFAKA SACCO SOCIETY LTD	P.O BOX 30586-00100 NAIROBI.
73.	NANDI FARMERS SACCO SOCIETY LTD	P.O BOX 333-30301 NANDI HILLS.
74.	NAROK TEACHERS SACCO SOCIETY LTD	P.O BOX 158-20500. NAROK.
75.	NASSEFU SACCO SOCIETY LTD	P.O BOX 43338-00100 NAIROBI.

76.	NATION SACCO SOCIETY LTD	P.O BOX 22022-00400 NAIROBI.
77.	NDEGE CHAI SACCO SOCIETY LTD	P.O BOX 857-20200 KERICHO.
78.	NDOSHA SACCO SOCIETY LTD	P.O BOX 532-60401 CHOGORIA-MAARA
79.	NGARISHA SACCO SOCIETY LTD	P.O BOX 1199-50200 BUNGOMA.
80.	NOBLE SACCO SOCIETY LTD	P.O BOX 3466-30100 ELDORET.
81.	NRS SACCO SOCIETY LTD	P.O BOX 575-00902 KIKUYU.
82.	NUFAIKA SACCO SOCIETY LTD	P.O BOX 735-10300 KERUGOYA.
83.	NYAHURURU UMOJA SACCO SOCIETY LTD.	P.0 BOX 2183-20300 NYAHURURU.
84.	NYAMBENE ARIMI SACCO SOCIETY LTD	P.O BOX 493-60600 MAUA.
85.	NYATI SACCO SOCIETY LTD	P.O BOX 7601-00200 NAIROBI.
86	NEW FORTIES SACCO SOCIETY LTD	BOX 1939-10100 NYERI
87.	ORIENT SACCO SOCIETY LTD	P.O BOX 1842-01000 THIKA.
88	PATNAS SACCO SOCIETY LTD	P.O BOX 601-20210 LITEN.
89.	PRIME TIME SACCO SOCIETY LTD	P.O BOX 512-30700 ITEN
90.	PUAN SACCO SOCIETY LTD	P.O BOX 404-20500 NAROK.
91.	QWETU SACCO SOCIETY LTD	P.O BOX 1186-80304 WUNDANYI.
92.	RACHUONYO TEACHERS SACCO SOCIETY LTD	P.O BOX 147-40332 KOSELE.
93	SHERIA SACCO SOCIETY LTD	P.O BOX 34390-00100NAIROBI.
94.	SIMBA CHAI SACCO SOCIETY LTD	P.O BOX 977-20200 KERICHO
95.	SKYLINE SACCO SOCIETY LTD	P.O BOX 660-20103 ELDAMA RAVINE.
96..	SMART LIFE SACCO SOCIETY LTD	P.O BOX 118-30705 KAPSOWAR.
97.	SOTICO SACCO SOCIETY LTD	P.O BOX 959-20406 SOTIK.
98.	TENHOS SACCO SOCIETY LTD	P.O BOX 391-20400 BOMET.
99.	TRANS-ELITE COUNTY SACCO SOCIETY LTD	P.O BOX 847-030300 KABSABET.

100.	UKULIMA SACCO SOCIETY LTD	P.O BOX 44071-00100 NAIROBI.
101.	UNAITAS SACCO SOCIETY LTD	P.O BOX 1145-10200 MURANG'A.
102.	VISION POINT SACCO SOCIETY LTD	P.O BOX 42-40502 NYANSIONGO.
103.	VISION AFRICA SACCO SOCEITY LTD	P.O BOX 18263-20100 NAKURU.
104.	WAKENYA PAMOJA SACCO SOCIETY LTD	P.O BOX 829-40200 KISII.
105.	WAANGA SACCO SOCIETY LTD	P.O BOX 34680-00501 NAIROBI.
106.	WANINCHI SACCO SOCIETY LTD	P.O BOX 910-10106 OTHAYA.
107.	WANANDEGE SACCO SOCIETY LTD	P.O BOX 19074-00501 NAIROBI.
108.	WASHA SACCO SOCIETY LTD	P.O BOX 83256-80100 MOMBASA.
109.	WAUMINI SACCO SOCIETY LTD	P.O BOX 66121-00800 NAIROBI.
110.	WEVARSITY SACCO SOCIETY LTD	P.O BOX 873-50100 KAKAMEGA.
111.	WINAS SACCO SOCIETY LTD	P.O BOX 696-60100 EMBU.

Appendix VII: Sacco Societies Licensed to Undertake Deposit-Taking Sacco Business in Kenya (2016)

NO	NAME OF SOCIETY	POSTAL ADDRESS
1.	AFYA SACCO SOCIETY LTD	P.O BOX 11607-00400 NAIROBI.
2.	AGRO GEM SACCO SOCIETY LTD	P.O BOX 94-40107 MUHORONI.
3.	ALL CHURCHES SACCO SOCIETY LTD	P.O BOX 2036-0100 THIKA.
4.	ARDHI SACCO SOCIETY LTD	P.O BOX 28782-00200 NAIROBI.
6.	ASILI SACCO SOCIETY LTD	P.O BOX 4906-00100 NAIROBI.
7.	BANDARI SACCO SOCIETY LTD	P.O BOX 95011-80104 MOMBASA
8.	BARAKA SACCO SOCIETY LTD	P.O BOX 1548-10101 KARATINA.
9	BARATON UNIVERSITY SACCO SOCIETY LTD	P.O BOX 2500-30100 ELDORET.
10.	BIASHARA SACCO SOCIETY LTD	P.O BOX 1895-10100 NYERI.
11.	BINGWA SACCO SOCIETY LTD	P.O BOX 434-10300 KERUGOYA.
12.	BORESHA SACCO SOCIETY LTD	P.O BOX 80-20103 ELDAMA RAVINE.
13.	CAPITAL SACOO SOCIETY LTY	P.O BOX 1479-602OO MERU.
14.	CENTENARY SACCO LTD	P.O BOX 12O7-60200 MERU.
15.	CHAI SACCO LTD	P.O BOX 278-00200 NAIROBI.
16.	CHUNA SACCO SOCIETY LTD	P.O BOX 30197-00100 NAIROBI.
17.	COSMOPOLITAN SACCO LTD	P.O BOX 1931-20100 NAKURU.
18.	COUNTY SACCO SOCIETY LDT	P.O BOX 21-60103 RUNYENJES.
19.	DAIMA SACCO SOCIETY LTD	P.O BOX 2032-60100 EMBU
20.	DHABITI SACCO LTD	P.O BOX 353-60600 MAUA.
21.	DIMKES SACCO LTD	P.O BOX 886-00900 KIAMBU.
22.	DUMISHA SACCO LTD	P.O BOX 84-20600 MARALAL.
23.	EGERTON SACCO SOCIETY LTD	P.O BOX 178-20115 EGERTON.
24.	ELGON TEACHERS SACCO SOCIETY LTD	P.O BOX 27-50203 KAPSOKWONY.
25.	ELIMU SACCO SOCIETY LTD	P.O BOX 10073-00100 NAIROBI.
26	ENEA SACCO SOCIETY LTD	P.O BOX 1836 101O1 KARATINA.
27.	FARIDI SACCO SOCIETY LTD	P.O BOX 448-50400 BUSIA.
28.	FARIJI SACCO SOCIETY LTD	P.O BOX 589-00216 GITHUNGURI.
29	FORTUNE SACCO SOCIETY LTD	P.O BOX 559-10300 KERUGOYA.
30.	FUNDILIMA SACCO SOCIETY LTD	P.O BOX 62000-00200 NAIROBI.
31.	GASTAMECO SACCO SOCIETY LTD	P.O BOX 189-60101 MANYATTA.
32.	GITHUNGURI DAIRY AND COMMNITY SACCO SOCIETY LTD	P.O BOX 896-00216 GITHUNURI
33.	GOODWAY SACCO SOCIETY LTD	P.O BOX 626-10300 KERUGOYA
34.	GUSII MWALIMU SACCO SOCIETY LTD	P.O BOX 1335-40200 KISII

NO	NAME OF SOCIETY	POSTAL ADDRESS
35.	HARAMBE SACCO SOCIETY LTD	P.O BOX 47815-00100 NAIROBI.
36.	HAZINA SACCO SOCIETY LTD	P.O BOX 59877-00200 NAIROBI.
37	IG SACCO SOCIETY LTD	P.O BOX 1150-50100 KAKAMEGA
38.	ILIKISONGO SACCO SOCIETY LTD	P.O BOX 91-00209 LOITOKITOK.
39.	IMARIKA SACCO SOCIETY LTD	P.O BOX 712-801O8 KILIFIFI.
40.	IMARISHA SACCO SOCIETY LTD	P.O BOX 682-20200 KERICHO.
41.	IMENTI SACCO SOCIETY LTD	P.0 BOX 3192-60200 MERU.
42.	JACARANDA SACCO SOCIETY LTD	P.O BOX 4-00232 NKUBU.
43.	JAMII SACCO SOCIETY LTD	P.O BOX 57929-NAIROBI.
44.	JITEGEMEE SACCO SOCIETY LTD	P.O BOX 86937-80100 MOMBASA.
45.	JUMUIKA SACCO SOCIETY LTD	P.O BOX 14-40112 AWASI.
46.	KAIMOSI SACCO SOCIETY LTD	P.O BOX 153-50305 SIRWA.
47.	KATHERA RURAL SACCO SOCIETY LTD	P.O BOX 250-60202 NKUBU.
48.	KENPIPE SACCO SOCIETY LTD	P.O B0X 314-00507 NAIROBI.
49.	KENVERSITY SACCO SOCIETY	P.O BOX 10263-00100 NAIROBI.
50.	KENYA ACHIVAS SACCO SOCIETY LTD	P.O BOX 3080-40200 KISII.
51.	KENYA BANKERS SACCO SOCIETY LTD	P.O BOX 73236-00200 NAIROBI.
52.	KENYA CANNERS SACCO SOCIETY LTD	P.O BOX 1124-00100 THIKA.KENYA
53.	KENYA HIGHLANDS SACCO SOCIETY LTD	P.O BOX 2085-002000 KERICHO.
54.	KENYA MIDLAND SACCCO SOCIETY LTD	P.O BOX 287-20400 BOMET.
55.	KENYA POLICE STAFF SACCO SOCIETY LTD	P.O BOX 51042-00200 NAIROBI.
56.	KIMBILIO DAIMA SACCO SOCIETY LTD	P.O BOX 81-20225 KIMULOT.
57.	KINGDOM SACCO SOCIETY LTD	P.O BOX 8017-00300 NAIROBI.
58.	KIPSIGIS EDIS SACCO SOCIETY LTD	P.O BOX 228 20400 B0MET.
59.	KITE SACCO SOCIETY LTD	P.O BOX 2073-40100 KISUMU.
60..	KITUI TEACHERS SACCO SOCIETY LTD	P.O BOX 254-90200 KITUI.
61	KMFRI SACCO SOCIETY LTD	P.O BOX 80862 MOMBASA.
62.	KOLENGE TEA SACCO SOCIETY LTD	P.O BOX 291-30301 NANDI HILLS.
63.	KONOIN SACCO SOCIETY LTD	P.O BOX 84-20403 MOGOGOSIEK.
64.	KORU SACCO SOCIETY LTD	P.O BOX PRIVATE BAG-40100 KORU.
65.	KWALE SACCO SOCIETY LTD	P.O BOX 123-80403 KWALE.
66.	KWETU SACCO SOCIETY LTD	P.O BOX 818-90100 MACHAKOS.
67.	K-UNITY SACCO SOCIETY LTD	P.O BOX 268-00900 KIAMBU.

NO	NAME OF SOCIETY	POSTAL ADDRESS
68.	LAMU TEACHERS SACCO SOCIETY LTD	P.O BOX 110-80500 LAMU.
69.	LAINISHA SACCO SOCIETY LTD	P.O BOX 272-10303 WAN'URU.
70.	LENGO SACCO SOCIETY LTD	P.O BOX 371-80200 MALINDI.
71.	MAFANIKIO SACCO SOCIETY LTD	P.O BOX 86515-80100 MOMBASA.
72.	MAGADI SACCO SOCIETY LTD	P.O BOX 13-00205 MAGADI.
73.	MAGEREZA SACCO SOCIETY LTD	P.O BOX 53131-OO2O0 NAIROBI
74.	MAISHA BORA SACCO SOCIETY LTD	P.O BOX 30062-00100 NAIROBI.
75.	MARSABIT TEACHERS SACCO SOCIETY LTD	P.O BOX 90-60500 MARSABIT.
76.	MENTOR SACCO SOCIETY LTD	P.O BOX 789-10200 MURANGA.
77	METROPOLITAN NATIONAL SACCO SOCIETY LTD	P.O BOX 871-00900 KIAMBU.
78.	MMH SACCO SOCIETY LTD	P.O BOX 469-MAUA
79.	MUIGIA SACCO SOCIETY LTD	P.O BOX 83-10300 KERUGOYA.
80.	MOMBASA PORT SACCO SOCIETY LTD	P.O BOX 95372-80104 MOMBASA.
81	MUDETE TEA GROWERS SACCO SOCIETY LTD	P.O BOX 221-50104 KAKAMEGA.
82.	OLLIN SACCO SOCIETY LTD	P.O BOX 83-IO300 KERUGOYA.
83.	MURATA SACCO SOCIETY LTD	P.O BOX 816-10200 MURANGA.
84.	MWALIMU NATIONAL SACCO SOCIETY LTD	P.O BOX 62641-00200 NAIROBI.
85.	MWIETHERI SACCO SOCIETY LTD	P.O BOX 2445-060100 EMBU.
86.	MWINGI MWALIMU SACCO SOCIETY LTD	P.O BOX 489-90400 MWINGI.
87.	MUKI SACCO SOCIETY LTD	P.O BOX 398-20318 NORTH KINANGOP.
88	MWITO SACCO SOCIETY LTD	P.O BOX 56763-00200 NAIROBI.
89.	2NK SACCO SOCIETY LTD	P.O BOX 12196-10100 NYERI.
90.	NACICO SACCO SOCIETY LTD	P.O BOX 34525-00100 NAIROBI.
91.	NAFAKA SACCO SOCIETY LTD	P.O BOX 30586-00100 NAIROBI.
92.	NANDI FARMERS SACCO SOCIETY LTD	P.O BOX 333-30301 NANDI HILLS.
93.	NANYUKI EQUATOR SACCO SOCIETY LTD	P.O BOX 1098-CX10400 NANYUKI.
94.	NAROK TEACHERS SACCO SOCIETY LTD	P.O BOX 158-20500. NAROK.
95.	NASSEFU SACCO SOCIETY LTD	P.O BOX 43338-00100 NAIROBI.
96.	NATION SACCO SOCIETY LTD	P.O BOX 22022-00400 NAIROBI.
97.	NAWIRI SACCO SOCIETY LTD	P.O BOX 400-16100 EMBU.
98.	NDEGE CHAI SACCO SOCIETY LTD	P.O BOX 857-20200 KERICHO.
99.	NDOSHA SACCO SOCIETY LTD	P.O BOX 532-60401 CHOGORIA-

NO	NAME OF SOCIETY	POSTAL ADDRESS
		MAARA
100.	NGARISHA SACCO SOCIETY LTD	P.O BOX 1199-50200 BUNGOMA.
101.	NOBLE SACCO SOCIETY LTD	P.O BOX 3466-30100 ELDORET.
102.	NRS SACCO SOCIETY LTD	P.O BOX 575-00902 KIKUYU.
103.	NUFAIKA SACCO SOCIETY LTD	P.O BOX 735-10300 KERUGOYA.
104.	NYAHURURU UMOJA SACCO SOCIETY LTD.	P.0 BOX 2183-20300 NYAHURURU.
105.	NYALA VISION SACCO SOCIETY LTD	P.O BOX 27-20306 NDARAGWA.
106.	NYAMBENE ARIMI SACCO SOCIETY LTD	P.O BOX 493-60600 MAUA.
107.	NYATI SACCO SOCIETY LTD	P.O BOX 7601-00200 NAIROBI.
108	NEW FORTIES SACCO SOCIETY LTD	BOX 1939-10100 NYERI
109.	ORIENT SACCO SOCIETY LTD	P.O BOX 1842-01000 THIKA.
110 111.	PATNAS SACCO SOCIETY LTD PRIME TIME SACCO SOCIETY LTD	P.O BOX 601-20210 LITEN. P.O BOX 512-30700 ITEN
112.	PUAN SACCO SOCIETY LTD	P.O BOX 404-20500 NAROK.
113.	QWETU SACCO SOCIETY LTD	P.O BOX 1186-80304 WUNDANYI.
114.	RACHUONYO TEACHERS SACCO SOCIETY LTD	P.O BOX 147-40332 KOSELE.
115.	SAFARICOM SACCO SOCIETY LTD	P.O BOX 66827-00800 NAIROBI.
116.	SHERIA SACCO SOCIETY LTD	P.O BOX 34390-00100NAIROBI.
117.	SHIRIKA SACCO SOCIETY LTD	P.O BOX 43429-00100 NAIROBI.
118.	SIMBA CHAI SACCO SOCIETY LTD	P.O BOX 977-20200 KERICHO.
119.	SIRAJI SACCO SOCIETY LTD	P.O BOX PRIVATE BAG TIMAU.
120.	SKYLINE SACCO SOCIETY LTD	P.O BOX 660-20103 ELDAMA RAVINE.
121.	SMART CHAMPIONS SACCO SOCIETY LTD	P.O BOX 660-60205 GITHINGO.
122..	SMART LIFE SACCO SOCIETY LTD	P.O BOX 118-30705 KAPSOWAR.
123.	SOLUTION SACCO SOCIETY LTD	P.O BOX 1194-60200 MERU.
124.	SOTICO SACCO SOCIETY LTD	P.O BOX 959-20406 SOTIK.
125.	SOUTHERN STAR SACCO SOCIETY LTD	P.0 BOX 514-60400 CHUKA.
126.	STAKE KENYA SACCO SOCIETY LTD	P.O BOX 208-40413 KAHANCHA.
127.	STIMA SACOO SOCIETY LTD	P.O BOX 75629-00100 NAIROBI.
128.	SUKARI SACCO SOCIETY LTD	P.O BOX 841-50102 MUMIAS.
129.	SUBA TEACHERS SACCO SOCIETY LTD	P.O BOX 237-40305 MBITA.
130.	SUPA SACCO SOCIETY LTD	P.O BOX 271-20600 MARALAL.
131.	TAI SACCO SOCIETY LTD	P.O BOX 718-00216 GITHUNGURI.
132.	TAIFA SACCO SOCIETY LTD	P.O BOX 1649-10100 NYERI.

NO	NAME OF SOCIETY	POSTAL ADDRESS
133.	TARAJI SACCO SOCIETY LTD	P.O BOX 605-40600 SIAYA.
134.	TELEPOST SACCO SOCIETY LTD	P.O BOX 49557-00100 NAIROBI.
135.	TEMBO SACCO SOCIETY LTD	P.O BOX 91-00618 RUARAKA.
136.	TENHOS SACCO SOCIETY LTD	P.O BOX 391-20400 BOMET.
137.	THAMANI SACCO SOCIETY LTD	P.O BOX 467-60400 CHUKA.
138.	TRANSCOUNTIES SACCO SOCIETY LTD	P.O BOX 2965-30200 KITALE.
139.	TRANS NATION SACCO SOCIETY LTD	P.O BOX 15-60400 CHUKA.
140.	TIMES U SACCO SOCIETY LTD	P.O BOX 310-60202 NKUBU.
141.	TOWER SACCO SOCIETY LTD	P.O BOX 259-20303 OL'KALAOU.
142.	TRANS-ELITE COUNTY SACCO SOCIETY LTD	P.O BOX 847-030300 KABSABET.
143.	UFANISHI SACCO SOCIETY LTD	P.O BOX 2973-00200 NAIROBI.
144.	UCHONGAJI SACCO SOCIETY LTD	P.O BOX 925-80102 MOMBASA.
145.	UKRISTO NA UFANISHI WA ANGLICANA SACCO SOCIETY LTD	P.O BOX 872-00605 NAIROBI.
146.	UKULIMA SACCO SOCIETY LTD	P.O BOX 44071-00100 NAIROBI.
147.	UNAITAS SACCO SOCIETY LTD	P.O BOX 1145-10200 MURANG'A.
148.	UNI-COUNTY SACO SOCIETY LTD	P.O BOX 10132-20100 NAKURU.
149.	UNITED NATIONS SACCO SOCIETY LTD	P.O BOX 30552-00100 NAIROBI.
150.	UNISON SACCO SOCIETY LTD	P.O BOX 414-10400 NANYUKI.
151.	UNIVERSAL TRADERS SACCO SOCIETY LTD	P.O BOX 219-90100 MACHAKOS.
152.	VIHIGA COUNTY FARMERS SACCO SOCIETY LTD	P.O BOX 309-50317 CHAVAKALI.
153.	VISION POINT SACCO SOCIETY LTD	P.O BOX 42-40502 NYANSIONGO.
154.	VISION AFRICA SACCO SOCEITY LTD	P.O BOX 18263-20100 NAKURU.
155.	WAKENYA PAMOJA SACCO SOCIETY LTD	P.O BOX 829-40200 KISII.
156.	WAKULIMA COMMERCIAL SACCO SOCEITY LTD	P.O. BOX 232-10103 MUKURWEINI.
157.	WAANGA SACCO SOCIETY LTD	P.O BOX 34680-00501 NAIROBI.
158.	WANINCHI SACCO SOCIETY LTD	P.O BOX 910-10106 OTHAYA.
159.	WANANDEGE SACCO SOCIETY LTD	P.O BOX 19074-00501 NAIROBI.
160.	WASHA SACCO SOCIETY LTD	P.O BOX 83256-80100 MOMBASA.
161.	WAUMINI SACCO SOCIETY LTD	P.O BOX 66121-00800 NAIROBI.
162.	WEVARSITY SACCO SOCIETY LTD	P.O BOX 873-50100 KAKAMEGA.
163.	WINAS SACCO SOCIETY LTD	P.O BOX 696-60100 EMBU.
164.	YETU SACCO SOCIETY LTD	P.O BOX 511-60202 NKUBU.

Appendix VIII: Pilot Survey

1.	AGRO GEM SACCO SOCIETY LTD	P.O BOX 94-40107 MUHORONI.
2.	ASILI SACO SOCIETY LTD	P.O BOX 4906-00100 NAIROBI.
3.	KENYA CANNERS SACCO SOCIETY LTD	P.O BOX 1124-00100 THIKA.
4.	KMFRI SACCO SOCIETY LTD	P.O BOX 80862-10400 MOMBASA.
5.	LENGO SACCO SOCIETY LTD	P.O BOX 371-80200 MALINDI.
6.	NYANYUKI EQUATOR SACCO SOCIETY LTD	P.O BOX 1098-10400 NYANYUKI.
7.	SAFARICOM SACCO SOCIETY LTD	P.O BOX 66827-00800 NAIROBI.
8.	SHIRIKA SACCO SOCEITY LTD	P.O BOX 43429-00100 NAIROBI.
9.	SOUTHERN STAR SACCO SOCIETY LTD	P.O BOX 514-60400 CHUKA.
10.	STIMA SACCO SOCEITY LTD	P.O. BOX 75629-00100 NAIROBI.
11.	SUPA SACCO SOCIETY LTD	P.O BOX 271-20600 MARALAL.
12.	SUBA SACCO SOCIETY LTD	P.O BOX 237-40305 MBITA.

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KENYA METHODIST UNIVERSITY

P. O. Box 267 Meru - 60200, Kenya
Tel: 254-064-30301/31229/30367/31171
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Email: info@kemu.ac.ke

Our ref: NAC/PHD/1/2019/6

10th SEPTEMBER 2018

Commission Secretary,
National Commission for Science, Technology and Innovations,
P.O. Box 30623-00100,
NAIROBI.

Dear Sir/ Madam,

RE: JOHN CHERUIT NG`ENO (BUS-4-1761-1/2014)

This is to confirm that the above named is a bona fide student of Kenya Methodist University undertaking a **PhD in BUSINESS ADMINISTRATION**. He is conducting a research titled **CAPITAL ADEQUACY FRAMEWORK, FUNDS ALLOCATION STRATEGY AND PERFORMANCE OF DEPOSIT TAKING SACCOs IN KENYA.**

We confirm that his thesis proposal has been defended and approved by the university.

In this regard, we are requesting your office to issue a permit to enable him collect data for his Ph.D. dissertation.

Any assistance accorded to him will be appreciated.

Yours faithfully,

DR. Evangeline Gichunge PhD.
ASS DIRECTOR RESEARCH DEVELOPMENT AND POSTGRADUATE STUDIES

Encl.

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR
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Date of Issue: **11/September/2019**

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off Waiyaki Way, Upper Kabete,
P. O. Box 30623, 00100 Nairobi, KENYA
Land line: 020 4007000, 020 2241349, 020 3310571, 020 8001077
Mobile: 0713 788 787 / 0735 404 245
E-mail: dg@nacosti.go.ke / registry@nacosti.go.ke
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