THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

Effects of Capital Structure on the Financial Performance of Savings and Credit Cooperative Societies in Kenya

Lydia Wambui Kimemia
Student, Department of Business Administration,
Jomo Kenyatta University of Agriculture and Technology, Kenya
Gregory Namusonge
Lecturer, Department of Business Administration,
Jomo Kenyatta University of Agriculture and Technology, Kenya
Maurice M. Sakwa
Lecturer, Department of Business Administration,
Jomo Kenyatta University of Agriculture and Technology, Kenya

Abstract:
The aim of this study was to analyze the influence of capital structure on how SACCOs' perform financially. The study targeted the 239 SACCOs in Mombasa that do not accept deposits from members. These were used as a representation of all such SACCOs in Kenya. A survey design that is both descriptive and exploratory was used in this study. Primary data was compiled through the use of questionnaire and collection forms aided the gathering of secondary data. Non – parametric, parametric tests were done to examine the influence and the direction of the association among capital structure and SACCOs' financial performance. The results of the correlation for the both primary and the secondary data showed that capital structure influenced financial performance in a way that was positive and significant. This implies that capital structure is important and SACCOs ought to handle their capital mix carefully. Results from the hypothesis testing indicated that there was need to reject the null hypothesis. The researcher suggested that SACCOs should employ capital mix that would help to improve how SACCOs performed financially. The researcher recommended the carrying out of a similar research in other sectors. A similar one could be done on SACCOs but this time use both structured and unstructured questionnaire with the aim of extracting more information.

Keywords: *Capital structure, financial performance, SACCOs*

1. Introduction

The background of this study deals with the SACCOs' financial performance from Global, African and Kenyan perspectives respectively.

1.1. Financial Performance of Saccos from Global Perspective

The concepts and values regarding how credit unions work was developed in the 19th century. In Britain pioneers of credit unions included Robert Owen, in Germany Herman Schulze-Delitzsch while in North America it was Alphonse Desjardin (Association of British Credit Unions Limited, 2016). Since then, cooperatives have increased tremendously and this is partially due to the efforts of the International Cooperative Alliance (ICA). The ICA was initiated in 1895 by E.V. Neale de Rochdale and Edward Owen Greening (Chom, 2017). The oldest cooperative was known as Rochdale Society and was formed in Rochdale in1844 by a group of 28 weavers and artisans (Khambule, 2015). There are over three million cooperatives and above 1.2 billion people worldwide belong to each of them (World Cooperative monitor, 2017). $2.2 billion are the savings held by the largest 300 cooperatives (International Cooperatives Alliance, 2018).

At the end of 2017, there were over 89,000 SACCO's/Credit Union/ CFIs/ Mutual, offering their services in 117 countries. Jointly, they had savings of US$1.7 Trillion, Loans of US$ 1.5 Trillion, reserves of US$195 billion, total assets of 2.1 trillion and a membership of over 260million with a penetration of 9.09%, (WOCCU, 2017). Among them, there are those that have very few members and are organized exclusively by volunteers and their main agenda is to get savings and issue loan products. At the other end there are those that are full-service financial providers that manage billions of dollars in assets and have paid employees (McKillop & Wilson, 2015). Association of British Credit union Limited, (2016) stated that over 70% of the population in Ireland and around 43% in America and Canada are involved in these institutions. A fast growth of these institutions has also occurred in Eastern Europe, parts of South America, Africa and the Far East.

1.2. Financial Performance of SACCOs from African Perspective

Wanjiru, (2016) stated that SACCOs and self- help groups are not strangers to the continent of Africa as even before the colonialists, there were savings groups that were known by different names. These savings groups managed savings and credit on a rotating basis and they had a simple organizational structure (Ksoll, Lilleør, Lønborg, & Rasmussen, 2016). SACCOs in Africa increased so much so till African countries decided to form an association for continental SACCOs named Africa Confederation of Cooperative savings and Credit Association, (ACCOSSCA) in 1965 (Mutai, (2016). The agenda of association was the promotion of SACCOs' principles, offering SACCO insurance and educating members on issues concerning SACCO. There are established SACCOs in twenty-eight Countries of Africa (Mutai, (2016). SACCOs have the benefit of the capability of getting customers in regions that banks are not attracted. Such regions include poverty-stricken areas or rural areas. (Njeru, 2016).

1.3. Financial Performance of SACCOs Kenyan Perspective

Lumbwa was the first cooperative to be started in Kenya in the year 1908 by the European settlers in the Rift Valley. Their aim was to take advantage of economies of scale in agricultural activities (Ochieng, Bogomko & Simiyu 2017). Kenyans were persuaded to start cooperatives through session Paper No. 10 which was published in 1965 with the aim of reducing poverty levels and hasten development. These cooperatives were spear headed by the government. Later the government supervisory powers were ignored and the cooperatives wished to be independent. The government in 1997 changed the cooperative societies Act of 1966 and certified that the cooperatives become autonomous (Wanyama, 2016). This freedom was abused through dishonesty and malpractices by members of the board which obligated the government to modify the 1997 Act through the amended Act of 2004 (Wanyama, 2016).

The SACCO sector in Kenya comprises 12000 registered cooperative societies with seven million members. It is rated number seven in the world and it is the largest in Africa (Warwathe, 2017). Kahuthu, (2016) argued that 63% of Kenyans take part partially or fully in cooperative societies. He went further to emphasis that Kenyans to the tune of 80% get their income directly or indirectly from cooperative related events. 1964 saw the establishment of Kenya's first SACCO. The SACCO became a sub- sector of the Kenyan cooperative movement. SACCOs in Kenya greatly increased in the 1970s though the fastest growth was experienced when commercial banks closed some of their branches in the 1990s (Nkuru, 2015). There are 7,400 registered SACCOs and out of these 3800 are active and 164 have FOSAs (SASRA, 2016). The SACCO movement has savings of more than Ksh. 150 billion (more than 30% of the National Domestic savings) and loans to the tune of Ksh. 120 billion (Njoroge & Rotich, 2016).

As stated earlier there are 7,400 registered SACCOs and out of these 3800 are active and 174 have FOSAs (SASRA, 2016). The SACCOs are divided in to two, Deposit Taking Cooperative Societies (DTSACCOs) and Non-Deposit Taking Cooperative Societies (NDTSACCOs), (KUSCO, 2018). The NDTS are governed by the law of 1997, as adjusted through Cooperatives Societies Amendment Act of 2004. This law was enacted to strengthen through the office of the commissioner for cooperative development, the cooperative movement principles. SASRA (SACCO Societies Regulatory Authority) was established in 2008 by a SACCO Act. SASRA is charged with the responsible of supervising, regulating and the issuance of license to SACCOs that receive deposits (Buluma, Kung'u & Mungai, 2017).

Mombasa County is located along the coastline of Kenyan. The second largest city in Kenya is found here. For SACCO management purposes, the County is subdivided into Mvita, Kisauni and Changamwe / Likoni. The County has a total of 244 active SACCOs. They have 35,882 shareholders with a total turnover of Ksh.1.057.831.845 and a total share capital and deposit of 3.882.055.698 (. M.I., T & C) Mombasa branch, 2016). Of these active SACCOS 5 take deposits from members while 239 do not take deposits from members. These two classifications of SACCOs are governed by different laws as indicated above and they therefore cannot be jointly studied as such, the researcher focused on those that do not take deposits (NDTSACCOs).

In an attempt to determine the internal issues that influences the progress of the SACCOs in Machakos County, Muithya (2019) used an explanatory assessment to request research information. In 2012, the target population consisted of 33 active SACCOs in Machakos County and they were all part of the research. This study made use of secondary data that was analyzed through descriptive. Inferential statistics was also done with the help of (SPSS) software version 17.0. Increase in domestic funding was found to cause a progression in the SACCOs' prosperity with a B-coefficient of 0.046 (which means that internal funding increases, the growth of wealth of SACCOs. It also appeared that a rise in external financing brought about an increase in SACCOs' prosperity (coefficient B = 0.182). The study concluded that both internal and external financing led to the growth of wealth of SACCOs in Machakos County.

The influence of loan tenure, interest rate, interest coverage rate and debt equity ratio on how SACCOs in Mara Sub-County, Tharaka Nithi-County, Kenya performed financially was investigated by Kirimi, Simiyu and Muriithi (2017). The analysis showed a high positive debt relationship ratio and interest coverage ratio on financial performance. A negative association between interest rate and loan tenure on financial performance was found to exist, which was calculated via return on assets. Ngeno (2019) suggested that performance depended on the policy of monetary management, capital structure and distribution of funds and concluded that a SACCO should invest where the profit exceeds the cost in order for the capital to optimize yields.

Siddik, Alam, Kabiraj & Joghee, (2017) looked at the way capital structure influenced Bangladesh banks' performance financially. Capital structure was measured through the ratio of Long duration debt to equity and the ratio between capital and equity to debt. The results of the study indicated that there was an association between Earnings per Share and Debt Capital in large corporations that was negative. Mathuva, & Kiweu, (2016) revealed a negative association between debt index and return on equity. This outcome agrees with one by Muigai, (2016) which revealed a negative significant influence between company performance and capital structure. Esokomi & Mutua (2018)

established that return on equity and capital structure had a positive and significant association. They suggested that unless SACCOs can acquire soft loans, they should reduce their borrowings. Mwatu & Abdul (2018), recognized that financial performance was influenced by debt in a statistically significant negative manner. They suggested that SACCOs ought to reduce the use of debt. As high levels of debt reduce profitability while increasing financial distress. Capital structure in this study was measured as the ratio between total liabilities and total assets.

1.4. Statement of the Problem

The SACCO Sector has long been in Kenya but has not been as forceful as other financial institutions as far as the delivery of financial services is concerned. This has been due to insufficient internal funds, cost of debt being high and undercapitalization (Onyango 2016, Mwatu & Farida, 2018) As a result, members seeking for financial services from SACCOs in Kenya have been declining (Kiragu, 2015, Ngure 2017). The decline was from 9.1% in the year 2009 to 13.5% in the year 2013. During the same period customers who sought for similar services from commercial banks rose from 13.5% to 29.2% (Kiragu, 2015, Ngure ,2017) The decline can be explained by the fact that SACCOs are faced with many challenges that include loan delinquency, insufficient capital funding and management and assessment of risks (Onyango,2016). Such challenges have driven some SACCOs like Urithi housing Cooperative to borrow up to 2 billion shillings from the local market to finance its operations (Ochingo & Muturi.2018).

Ondieki, Okioga, Okwena, & Onsase, (2017) accentuated that portfolio quality, investment policy and financing are the factors that influence how SACCOs performed financially. Mathuva, (2016) hypothesized that the depressing SACCOs' financial performance can be accredited to the absence of sufficient staff motivation and training, development of new services and product and information management. Mugambi, Njeru, Member, & Tirimba, (2015) states that to improve their performance, SACCOs should develop suitable financial strategy that would enable them to address the challenges indicated by respondents. These challenges include lack of member integrity as far as liquidity management is concerned, failure to adhere to proper methods during liquidation and depreciation of assets, high levels of loan demand and loan defaults.

Odhiambo, (2016) examined the factors that influences how SACCOs in Nakuru County in Kenya perform financially. The recommendation of the study was that SACCOs must advance their method of delivering service so as to entice additional members and to preserve the ones they already have. The researcher also suggested the development of employment management policies in accordance with the organization of the SACCO to make them more important as they play a significant role in financial performance. Esokomi & Mutua (2018) indicated that SACCO managers need to be educated in the deployment of successful savings mobilization for members and borrow less.

The foregoing has shown that several studies have been conducted seeking to find out what drives SACCOs' financial performance. The studies have focused on internal as well as external factors that influence how SACCOs perform financially. These studies mainly concentrated on only one variable such as inadequate capital, poor governance, financial innovations, SACCO investments, Performance management practices, SACCO strategic plan, staff training, Staff motivation, non-performing loans and members inputs to mention but a few. Very few of the studies conducted so far have a combination of two or more factors emanating from the environment within or outside the SACCO. A void therefore subsists to show how a grouping of either factors from within or factors from outside the SACCO would influence how they performance financially. This study pursues to combine four factors within the SACCO that is, liquidity management, capital structure, financial innovations and credit risk management to fill this gap.

1.5. Research Objective

To evaluate the effect of the capital structure on the Kenya's Non-Deposit-Taking Savings and Credit Cooperative Societies' financial performance.

1.6. Research Hypothesis

Capital structure does not have a significant effect on the financial performance of Kenya's Non-Deposit Taking Savings and Credit Cooperative Societies.

2. Literature Review

2.1. Introduction

This section summarizes findings by other researchers who have done their research in the same field. The areas covered include theoretical framework, conceptual framework and empirical review'

2.2. Pecking Order Theory

Donaldson proposed this theory (Myers, 1984) modified it and Omar (2017) cited it. This hypothesis suggests that businesses prefer internal financing. Funds from within the organization do not have issuing expenses and do not require additional financial details about the owner that could otherwise jeopardize their competitive advantage. A certain order that begins with debt, followed by convertible securities, then preferred stock and finally by common stock, is used by companies in need of external financing (Myers, 1984). This procedure illustrates managers' unwillingness to dilute control that would reduce the equity costs of the agency and prevent the declaration of a new equity issue that would result in a negative market reaction (Ozili, 2018).

Firms in need of external financing use a certain order that starts with debt, followed by convertible securities, then preferred stock and finally by common stock (Myers, 1984). This procedure reflects on the unwillingness of

managers to dilute control which would curtail the agency costs of equity and avoid the announcement of new issue of equity which would result to negative market reaction (Ozili, 2018). Pecking order theory has two assumptions about managers which include asymmetric information and that manager will act in the best interest of the existing shareholders of the company. The managers may fail to invest in a project that has positive NPV if it would require the issue of new equity. This is because such a project would give much of the project's value to new shareholders at the existing shareholders' expense (Myers & Majluf, 1984.

According to pecking order theory firms that are profitable and make earnings that are high enough for retention are expected to use less debt in their capital structure than those that do not attain high earnings. Rehman, (2016) indicated that the pecking order theory suggests that there is dissimilar information between managers and investors. This provides another means of overcoming one of the limitations of the original opinion of the capital organization as expressed by Modigliani and Miller, (1958). This dissimilarity leads to firms preferring internal funds over external funds. However, when the internal funds are not available anymore, debt is preferable to equity as equity is considered riskier. The charge of internal funds is internal and in complete control of the organization. Debt carries a higher risk since its cost is external and it has to be paid. Equity bears a higher adverse selection risk and information asymmetry since the investor and the firm are involved. Equity is therefore only used when borrowing power has been exhausted. This then confirms the pecking order theory that states that firms follow a hierarchical approach in in their selection of the financing sources. They first use retained or internal funds followed by debt and when this does not suffice, they use equity financing. Martinez, Valeria, & Guercio, (2019) indicated that the need for external borrowing will decrease with an increase of the profitability of a company although some studies indicated that there that there was a negative association between profitability and debt.

The relevance of this theory to this study is that it deals with the composition of capital, which is an independent variable of this study. The theory of pecking order is the theory that seeks to clarify the ideal capital structure that every organization needs (Martinez, Valeria, & Guercio, 2019). Decisions on capital structure influences both the growth of companies and corporate governance (Aslamah, 2019). The principle of the Pecking order justifies the choice taken between equity funding, debt financing and mix ratio financing.

2.3. Conceptual Framework

Wamiori (2019) refers to the conceptual framework as a graphical representation of the variables of a study's theorized relationships. In academic studies, it is imperative to theorize variables as this formulates the base for testing the research hypothesis and the formation of generalizations in the study results. Liu, Hope & Wang (2018) claimed that the conceptual framework is the collection of methodically formulated concepts to provide a focus, structure, and tool for knowledge clarification and fusion. The conceptual framework epitomizes the independent variables plus the dependent variable. Independent variables were Capital structure, liquidity management, credit risk management and financial innovations, while financial performance was the dependent variable.

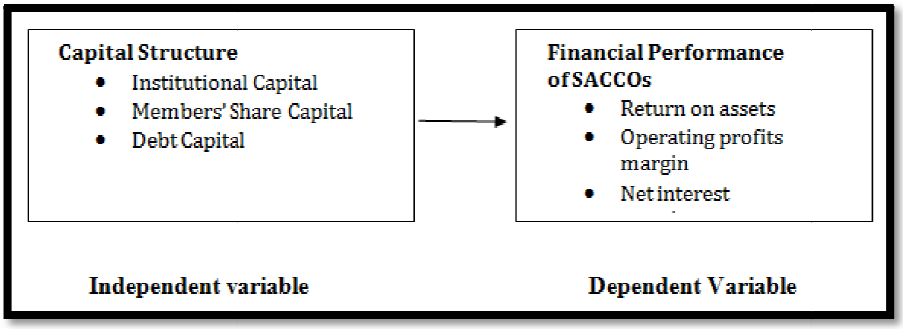

Figure 1: Conceptual Framework

2.4. Capital Structure and Financial Performance

Capital structure refers to how a firm funds its total assets, operations and growth through the floating of equity, highbred securities and debt (Okello,2015, Wamiori,2019) The capital mix of SACCOs is composed of institutional capital and members' capital which constitute the internal capital and debt capital or external capital. (Njenga, & Jagongo, 2019). Modigliani & Miller (1958) indicated that capital structure would not influence the charge on the capital if the world had a perfect capital market.

Generally, firms finance their investment firstly from internally generated funds. SACCOs' internally generated funds arise from retained earnings and members non-refundable share contributions. Internally generated finances are said to have the highest opportunity cost to the company because this is retention of earnings which could have been disbursed to the shareholders/ members as dividends and may affect them negatively (Zainudin, Mahdzan, & Yet, 2018). Secondly, declaration of dividends affects share prices (Harlina, & Khoiruddin, 2018). Where the firm in question is member based like in the situation the case of SACCOs, declaration of dividends may enhance or reduce their confidence in the SACCO.

After firms have utilized their internal finances, they revert to finance their activities with debt or loan capital. A leveraged firm is one with debt (Tonui, & Otinga, 2019). SACCOs borrow from KUSCO and commercial banks. Mwania, (2017) affirmed a negative association amid financial leverage and the financial results of Kenyan SACCOs. However, when Modigliani & Miller (1963) introduced taxes into the capital structure model he explained that the value of the company

increases when debt is included because interest payable on debts is not taxed. It is an expense that is exempted from taxation. Another reason as to why the introduction of debt advances the worth of the firm is the reduction of free flow of cash in the firm resulting to a reduction in agency cost. Hezbon & Muturi (2015) also established that SACCOs that borrowed funds manage to increase their loan portfolios. Though debt financing has its advantages as shown above it also has the likely disadvantage of bankruptcy costs (Njenga & Jagongo, 2019). Bankruptcy costs will arise in case the borrower is unable to pay and the court declares him or her bankrupt.

The relationship between capital structure and organization output is empirically confirmed by the theory of the agency and indicates a negative relationship. Esokomi & Mutua (2018) conducted a research on the variables that affect how SACCOs perform financially and recognized that a positive association that was significant existed between SACCOs' capital mix and financial results. Anarfo (2015) stated that the capital mix does not guide the performance of the bank, but rather that the later decides the former. Additionally, Briand (2019) established a positive association between capital mix and SME's in Thika Count in Kenya performance financially. The financial results of Kenyan manufacturing companies have been indicated to be slightly influenced by capital mix (Wamiori, 2019). One should arrive at a maximum capital structure that can improve the market price of a firm by taking into consideration, cost of capital and tax shield (Admati, Hellwig, DeMarzo, & Pfleiderer, 2018).

2.5.Measurement of Financial Performance

Financial performance of an organization is evaluated through a review of its statements of finance (Kahuthu, 2016). For this purpose, ratios such as earnings on equity, earnings on capital, earnings on assets, earnings on sales and operating margins are worked out (Karimi, Simiyu & Muriithi, 2017). Owing to their different aims, measuring the success of cooperative enterprises is more difficult than for other investor-owned enterprises (Fujo, & Ali, 2016). The aim for investor-owned companies is to maximize profits, while the aim of the cooperative is to provide members with a good price or service (Keben & Maina, 2018). A cooperative will be successful if it is able to incorporate existing business conditions and have competent management and governance (Keben, & Maina, 2018).

Bhamornsathit, & Katawandee, (2016), indicated that ratios like return on assets (ROA) and return on investment (ROI) are made use off when evaluating the financial performance of a corporation. Kiarithe, (2015) evaluated SACCOs' financial performance through profit before tax, Net profit, Member Savings, loan disbursement and dividend paid. Kirimi, Simiyu & Muriithi (2017) measured financial performance of SACCOs through return on equity (ROE). Shibutse, Robert, Kalunda, Achoki, (2018) measured SACCOs' financial performance using return on assets (ROA). Mwatu & Abdul, (2018) also measured financial performance of Deposit Taking SACCOs through return on assets. The current study measured financial performance through return on assets, net interest margin and operating profit margin.

2.6. Empirical Review

Empirical literature review is a deliberate examination of literature from plays, published works, newspapers and books that present concerns relevant to the research at hand (Hart, 2018). This chapter evaluated previous studies done on the influence of capital structure, liquidity management, credit risk management and financial innovation on how Kenyan SACCOs performed financially. Mwatu & Abdul (2018) tried to evaluate the influence of capital structure on the financial results of Kenya's DTSACCOs. The basic objective of the analysis was to study effect of the independent variables that is owners' capital and retained earnings, capital mix and liquidity on the dependent variable, financial performance. The research was based on the pecking order theory. The study utilized the causal exploration design and utilized quarterly qualitative statistics for entire DTSACCOs in Kenya for the period 2012-2016. The evaluation established that debt's influence was negative and statistically significant, equity's influence was positive and statistically significant, while liquidity's influence was negative and statistically insignificant on DTSACCOs' financial performance. The study proposed that the goal of DTSACCOs should be to recruit more members and to allow current members to raise their share contributions as a means of obtaining additional capital. The other endorsement was that makers of policy should contemplate on lowering the DTSACCOs' minimum liquidity requirement.

The research by Kirimi, Simiyu & Muriithi (2017) looked at the effect that financing through debt had on how SACCOs performed financially. The study considered the influence of interest rate, loan tenure, debt/equity ratio and interest coverage ratio on financial performance calculated using ROE. The study showed that the number of times interest was covered by earnings, earnings on equity and debt to equity ratio had an association with debt that was significant and positive. A relationship that was significant and negative was established between interest rate, loan tenure and ROE. The study resolved that interest rate that is charged on a loan, the duration of the loan repayment, loan repayment and the leverage ratio are vivacious factors that affect how SACCOs perform financially. The study recommended that SACCOs' management should try to finance SACCOs with less costly loans to implement their strategy, maintain their market share, strive to meet their customers' loan demand and ensure that loan coverage is high enough to meet interest payment obligations.

Another study by (Esokomi & Mutua 2017) deliberated on factors that influence how SACCOs in Kakamega County, Kenya performed financially. Survey design that was descriptive was made use of and census was the sampling technique. The association between the dependent and the independent variables was assessed through the regression analysis. The study indicated a positive and significant association between return on equity (ROE), capital mix, liquidity, and income divergence. While the relationship between asset quality and ROE was negative and significant. The study suggested that all SACCO managers should be trained on the placement of efficient systems to support liquidity risk control details, encourage members to increase their savings and borrow less unless they can manage to get soft loans.

Mwizambi, Kumar, Mnzava and Prusty (2016) carried out a research on how capital structure influenced how

SACCOs Tanzania performed financially. The study made use of panel data of 484 observations of SACCOs whose information had been assembled by the Bank of Tanzania for the period 2008-2012. The study used fixed effects approach. The findings indicated that increased use of members' savings and using large proportions of resources for lending purposes brought about improved financial performance. The mass of the SACCO was seen to influence financial performance negatively while debt use does not give an assurance that DTSACCOs in Kenya will perform well financially.

3. Research Methodology

3.1. Introduction

This chapter is concerned with the research design, target population, data sampling and sample size, data collection and analysis methods that were utilized to tackle the research questions discussed previously and to test the postulated hypothesis.

3.2. Research Design

Akhtar, (2016) indicates that research design is a prearrangement of situations for collection and analysis of data in a way that purposes to combine relevance to the research resolution with economy in the process. The research design is important in any study as it specifies the methods to be used to collect and analyse data (Dudovskiy, 2018). The study adopted both cross-sectional research design and descriptive research design. The cross-sectional research design was adopted because it has the ability to combine quantitative and qualitative methods (Weeks & Namusonge, (2016). Cross sectional studies data are collected at once perhaps over a period of days, weeks or months in order to answer research questions (Brannen, 2017). The descriptive survey design is designed to collect data from a sample in order to interpret them statistically and generalize the findings to a population (Kihara, 2016). The researcher managed to collect study data over the same era through the use of cross-sectional design. The descriptive research design was used to assess the relationship between financial performance and the independent variables. In previous research, this technique has been successfully used (Ng'ang'a, 2017, Wamiori 2019).

3.3. Target Population

Kungu (2015) defined a population as a collection of items about which we are about to make conclusions. Sasaka (2016) stressed that a target population is the collection of characters to whom the assessment applies. The study focused on Non-Deposit Taking SACCOs (NDTSACCOs) in Mombasa. The target population was the 239 active NDTSACCOs in Mombasa County as at 31-12 -2016 to which one questionnaire was issued to the senior most employee in the SACCO. The target population is shown on Table 1 below

Sub-County	Population Size
Mvita	135
Kisauni	53
Changamwe/ Likoni	51
Total	239

Table 1: Population Size

Source: Ministry of Industrialization and Enterprise Development (31-12-2016)

3.4. Sampling Technique

Stratified sampling accompanied by purposeful sampling was used in this analysis. Stratified sampling was used since the SACCOs were in various sub-counties and each county needed to pick a sample. Githaiga (2019) noted that purposeful sampling requires selecting such items or cases based on a particular purpose, rather than randomly selecting them. The supervisors, accountants and book-keepers were those with the necessary data in this report.

Sub –County	Target Population	Sample
Mvita	135	85
Kisauni	53	33
Changamwe/ Likoni	51	32
Total	239	150

Table 2: Sample Size

3.5. Data Collection Procedure

Before embarking on the collection of data, the researcher gave an introduction letter (certified by the university) to the respondents. The letter of introduction was to provide confidence and encouragement to the respondents to give accurate information. The questionnaires were also accompanied by a self-introduction letter in which the researcher clarified the purpose of the questionnaire to the respondent. Stating categorically that the information gathered was to be treated as highly confidential and used for academic purposes only. The questionnaires were dropped and collected at an agreed later date by the researcher and those who assisted the researcher.

Secondary data was amassed from SACCOs' audited statements of finance filled at the offices of the concerned

Ministry. The acquired data was inserted into forms that were predesigned for the purpose of analyzing the different ratios. The analysis of the data was done and the pre-requisite tests undertaken with the aim of assessing correlations and testing of the hypothesis.

3.6. Pilot Study

Piloting is the study carried out before the actual study as a way of examining the effectiveness of researchers' data gathering gadgets and the procedures used (Kallio, Pietilä, Johnson, & Kangasniemi, (2016). Chaudhuri. Rizos, Trenkwalder, Rascol, Pal, Martino, & Silverdale, (2015) indicated that the purpose of pilot testing is to ascertain the correctness and suitability of the research design and instruments. Chaudhuri, Rizos, Trenkwalder, Rascol, Pal, Martino, & Silverdale, (2015) stated that it is necessary to use pilot because one will usually find vague questions and questions which turn out not quite relevant for producing the kind of information among other errors. A trial study was conducted to access the applicability of the questionnaire. Where the questions were seen to be ambiguous, they were rectified in order to remove any ambiguity and where it was observed that improvements were required; this was incorporated ahead of the final questionnaire being distributed to the respondents. Twenty-six questionnaires were sent to randomly selected employees of the SACCOs to test their reliability. Eldridge, Chan, Campbell, Bond, Hopewell, Thabane, & Lancaster, (2016) states that five to ten percent of the target population should constitute the pilot sample. Those in the pilot sample were not included in the final study in order to avoid bias in responses if they were to fill the questionnaires ones more.

3.7. Empirical Model

Multiple regression model measures the influence of many independent variables on the dependent variable (Okello, 2015). The multiple linear regression model adopted in this study is one used by (Talvo, Apolinar, Aquino, Santos, Nifa, Tanigue, & Diza, 2018). This model is as shown below.

$Y = \beta_0 + \beta_1 X_1 + \varepsilon$ ..... Equation 3.2, where

Y = Financial performance of the SACCOs)

β_0 = Constant or intercept (value of dependent variable when all independent variables are zero)

β_1 = corresponding coefficients for the independent variables.

X_1 = Capital Structure

ε = Error term

4. Results and Discussions

4.1. Introduction

This chapter depicts the findings of the study and how the findings have been discussed. It pursued to find out the effects of capital structure on financial performance of NDT SACCOs. The findings and discussions are shown below.

4.2. Response Rate

The overall response rate was 70%. This response rate was deemed adequate following sanctions given Rindfuss (2015) who indicated that a rejoinder above 50% is suitable for further study.

Sub-county	Questionnaires Distributed	Questionnaires Returned	% Return
Mvita	85	62	73
Kisauni	33	20	61
Changamwe/ Likoni	32	23	72
Total	150	105	70

Table 3: Response Rate

4.3. Diagnostic Tests

As indicated in chapter three, the data was tested for conformity to the expectations of the conventional regression linear model by performing, reliability test, validity test, sample adequacy test, normality test, linearity, autocorrelation and multicollinearity tests.

4.3.1. Reliability

The Cronbach alpha is a measurement that indicates the relationship between each item and the entire group. Cronbach alpha was used to test the reliability of the questions. The larger the coefficient, the better the instruments of measurement are. There is reasonable reliability if the value of at least 0.7 is achieved (McCullagh, 2018). There was an average coefficient of 0.881 in the questionnaire, which represents strong internal consistency. Table 4 below displays the Cronbach Alpha coefficient results.

NO	variable	No of items	Cronbach alpha	Comment
1	Capital Structure	9	0.824	Reliable
2	Liquidity Management	9	0.864	Reliable
3	Credit Management	9	0.829	Reliable
4	Financial Innovations	9	0.941	Reliable
5	Financial Performance	9	0.946	Reliable
	Average		**0.881**	**Reliable**

Table 4: Cronbach's Alpha Results for Reliability Assessment

4.3.2. Validity Test

The following formula was used to calculate the content validity index (CVI) in this study. **CVI = K/ N,** Where K, represents the items in the questionnaire that the raters have acknowledged to be valid. N is the sum of the items in the questionnaire. The items in this study were 43 items. Content validity in this study was done by five raters. The results of the ratings are reflected on Table 5below.

Rater	N	K	CVI
1	43	38	.888
2	43	39	.902
3	43	36	.843
4	43	37	.860
5	43	35	.814

Table 5: Content Validity Results

Since the Raters' validity of the contents was more than 0.8 it was considered that the questionnaires were capable of gathering the required information.

4.3.3. Sampling Adequacy

Tests of sampling adequacy were done to confirm whether the study variables were valid. These were to help the study identify whether the items were fit for further analysis. Kaiser- Meyer-Olkin (KMO) of sampling adequacy and Bartlett's test of Sphericity were undertaken. KMO's lowest value is 0 and the highest is 1. A value approaching 1 show that correlation patterns are compacted and therefore the variables are suitable for the study. Gitahi, & Okech, (2018) indicated in their research that KMO values of 0.5 meet the threshold. The primary data test results showed values of more than 0.5 meaning the sample were adequate. The variables used in this study had the following values, financial performance 0.895, Capital structure 0.848. Bartlett's Test of Sphericity analyses whether the samples are from populations with equal variances. Results with a P value below 0.05 show a satisfactory degree of sampling sufficiency. All the samples were considered adequate as all of them had a p-value below 0.05 at 95% confidence level. These results are represented on Table 30 below.

Variable	KMO test of sampling adequacy	Barlett's test of sphericity		
		Chi square	Df	Significance
Financial performance	0.895	917.254	36	0.000
Capital structure	0.848	249.781	36	0.000

Table 6:: Primary Data Results for Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

Under secondary data financial performance was represented by, ROA which had a KMO value of 0.696. NIM had a KMO measure of 0.647 and Operating profits margin had a KMO measure of 0.754, Capital structure was represented by total liabilities divided by total assets with KMO value of 0.721 The Bartlett's Test showed a p value that was below 0.05 for all the variables which meant that they had an acceptable degree of sampling. The Kaiser-Meyer-Olkin (KMO) and Bartlett's Test for the Secondary data are shown on Table 31 below.

Variable	KMO test sampling adequacy	Barlett's test of sphericity		
		Chi Square	Df	Significance
Return on assets	.696	237.224	10	0.000
Net interest margin	.647	123.493	10	0.000
Operating profit margin	.754	191.383	10	0.000
Total liabilities/ Total assets	.721	178.338	10	0.000

Table 7: Secondary Data Results for Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

The P values revealed on Table 7 are below 0.05 which meant that the secondary data were fit for further analysis

4.3.4. Normality Test

Normality was tested through the Kolmogorov-Smirnov Test. For a distribution that is significantly similar to a normal distribution, p is below 0.05. If P is greater than 0.05 the distribution is significantly dissimilar to a normal distribution (Kilungu, 2015). The following null hypothesis was tested for every variable. Ho: The data is not normally distributed. The results are shown on Table 32 below.

Variable	Mean	Std.Deviation	Kolmogorov Smirnow Test Z	Significance
Financial performance	4.0021	.49881	3.154	0.000
Capital structure	3.9799	.34584	2.791	0.000
Liquidity Management	4.0169	.39186	2.605	0.000
Credit Risk Management	3.9302	.39079	2.495	0.000
Financial Innovations	3.9852	.49308	3.782	0.000

Table 8: One Sample Kolmogorov Test (Primary Data)

Table 8 above reveals p-values of below 0.05. This implies that the null hypothesis should be done away with and then the alternative hypothesis be considered meaning that the data are normally distributed. They were all, therefore, fitting for further study.

Variable	Mean	STD.Deviation	Kolmogorov Smirnow Test Z	Significance
Return on assets	3.4552	.38878	1.306	0.041
Net interest margin	3.4114	.34622	2.158	0.000
Operating profit margin	3.6800	.35257	1.666	0.008
Total liabilities/total assets	2.9591	.37997	1.475	0.026

Table 9: One Sample Kolmogorov Test (Secondary Data)

The secondary data p values reflected on Table 9 above were below 0.05 which implies that the data was good and could be used for further analysis.

4.3.5. Linearity Test

Linearity was measured through Pearson product moment correlation coefficient. The results for this for the primary as well as the secondary data are shown on Table 10 and 11 below

Independent Variables	Pearson product correlation coefficient	Significance
Capital structure	0.592	0.000

Table 10: Pearson's R for Independent Variable and Financial Performance (Primary Data)

Independent Variables	Pearson product correlation coefficient	Significance
Debt asset ratio	0.386	0.000
Net present margin	0.413	0.000
Operating profit margin	0.373	0.000

Table 11: Pearson's R for Independent Variable and Financial Performance Measures

All the Pearson product correlation coefficients shown on Table 10 to 11 were significant as they had p-values that ranged from 0.000 to 0.001which are lower than the conventional value of 95% or 0.95 confidence. This implies an association between the dependent variable and the independent that was statistically significant for both the primary and secondary data.

4.4. To evaluate whether Capital Structure influences Financial Performance

To achieve this, the study sought to analyse how capital structure affected the financial performance of SACCOs. This was done through the use of descriptive analysis, Factor analysis and correlation.

4.4.1. Descriptive Analysis of Capital Structure

The study was directed at finding out how financial structure affected SACCO's financial performance. The mean score of the relationship among the capital structure and financial performance was measured through descriptive analysis while the spread from the mean score was calculated using standard deviation

4.4.1.1. Primary Data

NO.	Statement.	Mean	Std. Dev.
1	Increased Institutional capital over time has led to improved financial performance of our SACCO.	3.9238	.53160
2	Sufficient institutional capital has enhanced financial performance of our SACCO.	3.9524	.54386
3	Sustained institutional capital has facilitated improved financial performance of our SACCO.	4.0000	.41603
4	Increased members' share capital over time has enhanced improved financial performance of our SACCO,	4.0095	.44926
5	Sustained members' share capital has enhanced improved financial performance of our SACCO.	3.9810	.53675
6	Adequate members' share capital has facilitated improved financial performance of our SACCO	3.9905	.52797
7	Reduced debt capital has facilitated improved financial performance of our SACCO.	3.9714	.71330
8	Favourable debt capital policy has led to improved financial performance of our SACCO.	4.0000	.51887
9	Low interest debt capital (members' deposits) has enhanced improved financial performance of our SACCO.		
		3.9905	.53150
	Average	3.9799	.53150

Table 12: Descriptive Results for Primary Data for Financial Performance and Capital Structure

Key Scale: 1-8 Strongly Disagree, 1.9-2.6 Disagree, 2.7-3.4 Neutral, 3.5-4.2 Agree And 4.3-5.0 Strongly Agree

The nine measures used in this study were analysed using descriptive statistics. These measures were, increased institutional capital, sufficient institutional capital, sustained institutional capital, increased members' share capital, sustained members' share capital, adequate members' share capital, reduced debt capital, favourable debt capital policy and use of low debt capital. The result of the descriptive results on capital structure are represented on Table 12 above. From Table 36 above it can be observed that if these variables were ranked, increased members' capital overtime has enhanced improved financial performance of our SACCO with a mean of 4.0095 would be number one, sustained institutional capital and favourable debt policy both with a mean of 4.000 respectively would be position two. Adequate members' capital and low debt capital with means of 3.9905 respectively would be in position thee. Sustained members' share capital has enhanced improved financial performance of our SACCO with a mean of 3.9810 would be in position four. Reduced debt capital has facilitated improved financial performance of our SACCO with a mean of 3.9714 would be in position five, Sufficient institutional capital has enhanced financial performance of our SACCO with a mean of 3.9524 wound be in position six and finally increased institutional capital over time has led to improved financial performance of our SACCO with a mean of 3.9238. The implication is the higher the mean the greater the influence that this construct has on financial performance of SACCOs.

The average mean response score for the influence of the capital structure on financial performance was 3.9799 and a standard deviation of 0.53150. This indicated that the greater proportion of the respondents agreed that the capital structure influences SACCOs' financial performance. The respondents approved that the financial performance of SACCOs is enhanced by additional use of internal finance. This research is in accordance with Mwizambi, et al. (2016), who discovered that increased use of savings by members and the use of large portions of capital for lending purposes contributes to improved SACCO performance. This study also agrees with one by Briand (2019), who found a positive relationship in Thika County of Kenya among the SMES' financial performance and capital structure. Anarfo (2015) contradicts the findings that capital structure is the one that affects financial performance and claimed that the capital structure is not the one that guides bank performance, but rather the latter that determines the former

4.4.1.2. Secondary Data

For the descriptive analysis of Capital structure secondary data, capital structure was expressed through debt ratio where total liabilities are divided by total assets. The descriptive results for the secondary data between capital structure and financial performance of SACCOs is shown on Table 37 below. Results from Table 37 below shows that the mean scores were changing from one year to the other. The mean for total liabilities to total assets was highest in year five with a mean of 3.3333. The implication here is that a higher mean has a higher influence on this construct of capital structure.

			N	Mean	Std. Deviation
Debt asset ratio	Year	1	105	2.5905	.58335
Debt asset ratio	Year	2	105	2.8286	.52728
Debt asset ratio	Year	3	105	2.9714	.44844
Debt asset ratio	Year	4	105	3.0667	.44434
Debt asset ratio	Year	5	105	3.3333	.54889
Valid N (listwise)			105		

Table 13: Descriptive Results for Capital structure (Secondary Data)

4.4.2. Capital Structure Factor Results

Factor analysis deals with reduction of variables in to fewer variables that share a common variable. The factors are then grouped in order to retain a small number of factors which has the highest influence (Kiaritha,2015) as cited by (Wamiori, 2019). The analysis of variance identifies the Eigen values. Eigen values are elements that describe the rate of change in each variable in relationship to the total overall variables. Other elements in the examination of variance comprise the percentage of variance plus the cumulative percentage which are explained by the extracted factors before and after the rotation. The extracted factors are presented on Table 14 below.

Compon. t	Initial Eigenvalues Total	% of Varia-Nce	Cumulative %	Extraction Sums of Squared Loadings Total	% of Variance	Cumulative %
1	3.800	42.225	42.225	3.800	42.225	42.225
2	.978	10.862	53.087			
3	.857	9.525	62.612			
4	.739	8.216	70.828			
5	.699	7.770	78.599			
6	.598	6.649	85.248			
7	.530	5.888	91.136			
8	.430	4.773	95.909			
9	.368	4.091	100.000			

Table 14: Total Variance Explained
Extraction Method: Principal Component Analysis.

The outcomes on Table 14 above indicate the presence of a critical factor of capital structure that influences SACCOs' financial performance. This factor had Eigen value of 3.800 and donated 42.23 % of the total variance in this construct.

NO.	Statement	Component
		1
1	Increased Institutional capital over time has led to improved financial performance of our SACCO.	.691
2	Sufficient institutional capital has enhanced improved financial performance of our SACCO.	.715
3	Sustained institutional capital has facilitated improved financial performance of our SACCO.	.605
4	Increased members' share capital over time has led to improved financial performance of our SACCO,	
		.643
5	Sustained members' share capital has enhanced improved financial performance of our SACCO.	.624
6	Adequate members' share capital has facilitated improved financial performance of our SACCO	.658
7	Reduced debt capital has facilitated improved financial performance of our SACCO.	.656
8	Favourable debt capital policy has led to improved financial performance of our SACCO.	.691
9	Low interest debt capital (members' deposits) has enhanced improved financial performance of our SACCO.	.550
	Cronbach Alpha	**.824**
	Mean	**3.9799**

Table 15: Rotated Component Matrix for Capital Structure Factors

A confirmatory factor analysis of the capital structure was carried out. The factor analysis results are shown on Table 39 above. Out of the nine all were retained as they met threshold values of 0.4 and above (Ng'ang'a, 2017). These results validate that in this study there was only one critical factor influencing financial performance and had 42.23 % of the total variance in this construct. This critical factor had nine items with high loadings and significance namely, sufficient institutional capital 0.715, increased institutional capital 0.691, sufficient members' capital 0.658, reduced debt capital 0.656, sustained institutional capital 0.605, Low interest debt capital 0.550. This critical factor was named internal financing. The items in the critical factor had a mean of 3.9799 and a Cronbach Alpha of 0.824.

4.4.3. Capital Structure Correlation Matrix

Correlation amid financial performance and Capital Structure was evaluated using Karl Pearson Coefficient. Results for both the primary and secondary data are shown on Table 4.20 and Table 17respectively.

		Financial Perp Performance	**Capital Structure**
Financial Performance	Pearson Correlation		
	Sig. (2-tailed)		
	N	105	
Capital Structure	Pearson Correlation	.592**	
	Sig. (2-tailed)	.000	
	N	105	105

Table 16: Correlation Results for Financial Performance and Capital Structure (Primary Data)

***. Correlation is significant at the 0.01 level (2-tailed)*

The Pearson correlation between primary data from capital structure and financial performance was 0.592 as shown on Table 4.20 above. This indicated that there was a slightly strong positive association amongst capital structure and financial performance. This association was statistically significant with a p value of 0.000.

The results of the secondary data, shown on Table 17 below revealed a weak and statistically significant association between debt ratio and the measures of financial performance which were return on assets, net interest margin and operating profit margin with a correlation coefficient of 0.386, 0.423,0.373 and p-values of 0.000 each respectively.

		Debt ratio	**Return on assets**	**Net interest margin**	**Operating profit margin**
Debt ratio	Pearson Correlation				
	Sig. (2-tailed)				
	N	105			
Return on assets	Pearson Correlation	.386**			
	Sig. (2-tailed)	.000			
	N	105	105		
Net interest margin	Pearson Correlation	.413**	.592**		
	Sig. (2-tailed)	.000	.000		
	N	105	105	105	
Operating profit margin	Pearson Correlation	.373**	.554**	.660**	
	Sig. (2-tailed)	.000	.000	.000	
	N	105	105	105	105
**. Correlation is significant at the 0.01 level (2-tailed).\					

Table 17: Correlations Results for Financial Performance Indicators and Capital Structure Indicators for Secondary Data

4.4.4. Financial Performance and Capital Structure Regression Results

The ultimate purpose of the analysis was to determine the influence of the independent variables on the dependent variable. This was accomplished through linear regression for both the primary and the secondary data.

4.4.4.1. Primary Data

The results for the regression of the primary data are shown on Table 18below.

It can be observed from the analysis in Table 18below, that the capital structure had an effect of 35.1 on the financial results. This is seen as the R square of 0.351. This means that SACCOs' financial performance in Kenya was influenced by the capital structure by 35.1 percent. The model is statistically significant, as shown by a p- value of 0.000. This means that capital structure is a good predictor of financial performance of SACCOs. This is confirmed by an F-statistic of 55.587 with a p-value of 0.000, which is below the p-value of 0.05 at the 95 percent confidence level

Financial Performance	Coefficient	Std. Error	t	significance
Constant	.664	.458		1.319 .009
Capital Structure	.854	.115		7.456 .000
R Square	.351			
F-Statistics	55.587			
P- Value	.000[b]			

Table 18: Financial Performance and Capital Structure Regression Model for the Primary Data

Y= B0 +B1 X1

The specific model was, Financial Performance = 0.664 + 0.854 capital structure.

These results are in agreement with a study by Braind (2019), who indicated a positive relationship in Thika County in Kenya among the financial performance of SMEs and the capital structure. It is also supported by study by Wamiori (2019) which revealed a moderate effect of capital structure on the financial performance of Kenya's manufacturing companies. The study results also agree with Esokomi & Mutua (2018), who showed a significant and positive correlation between SACCOs' financial performance and capital structure. This contradicts Anarfo (2015), who found that the capital structure is not the one that drives banks' financial performance, but the capital structure is determined by the financial performance of the banks.

4.4.4.2. Secondary Data

The secondary data for capital structure was measured through Debt ratio (Ratio of total debts to total assets) while measures for financial performance were (ROA) Return on Assets, (NIM) Net interest margin and (OPM) operating profits ratio. The regression results for these variables are depicted on Tables 4.23 - 4.25 below.

ROA	Coefficient	Std. Error	t	Significance
Constant	2.288	.277	8.249	.000
Debt to asset Ratio	0.394	.093	4.240	.000
R Square	.149			
F-Statistic	17.981			
p-value	0.000[b]			

Table 19: Regression Model for Return on Assets and Debt Ratio

Y= β0 +β1X1

The specific model was Return on assets (ROA) = 2.288 + 0.394 Debt asset ratio (DAR)

The model as shown on Table 4. 23 above shows that DAR influenced 14.9% of financial performance of SACCOs as measured through return on assets. This is confirmed by R Square of 1.49. This means that capital structure measured through debt capital ratio influences 14.9% of financial performance measured through return on assets. The model has a p-value of 0.000. AS this is below 0.05 at 5% level of significance, the model is significant. Capital structure is seen as a good predictor of financial performance as indicated by an F- Statistics of 17.981 with a p-value of 0.000 which is less than the conventional value of 0.05 at 95% confidence level.

NIM	Coefficient	Std. Error	t	Significance
Constant	2.298	.244	8.426	0.000
Debt asset Ratio	.376	.082	4.602	0.000
R Square	.171			
F- Statistic	21.179			
P-value	0.000[b]			

Table 20: Regression Results for Net Interest Margin and Debt asset Ratio

Y = β0 +β1X1

The specific model was, Net interest margin = 2.298 + 0.376 Debt asset ratio

The model as shown on Table 20above indicate that capital structure measured through debt to asset ratio influenced 17.1% of the variance in financial performance measured against net interest margin. This is confirmed by R square of 1.71. This model is had a p-value 0.000 which is below the critical value of 0.05 at 95% confidence level. The

model also shows that capital structure is a predictor of financial performance ascertained by an F- statistic of 21.179 and a p value of 0.000.

From Table 21below it can be seen that R square is .139. This means that capital structure measured through debt capital ratio affects the financial performance measured through operating profit margin of SACCOs' in Kenya by 13.9 %. The model has a p-value of 0. 000.This implies that the model is significant statistically significant as the p value is lower than the critical value of 0.05 at 95% confidence level. The model is confirmed to be a good predictor of financial performance as its F-statistic is 16.610 and a p-value 0.000.

OPM	Coefficient	Std.Error		significance
Constant	2.657	.253	10.502	0.000
Debt asset ratio	0.346	.085	4.075	0.000
R Square	.139			
F. Statistic	16.610			
P-value	0.000[b]			

Table 21: Regression Results for Debt Ratio and Operating Profit Margin
$Y= \beta 0 + \beta 1X1$

The specific regression model is, Operating profit margin = 2.657 + 0.346 Debt asset ratio

4.4.5. Hypothesis Testing

The acceptance or rejection criteria is based on the p-value. If it is below the critical value of 0.05 at the 95% confidence level reject the null hypothesis while a value greater than 0.05 means the null hypothesis should be accepted. The null hypothesis, H01, was that the financial performance of NDTSACCOs in Kenya was not substantially affected by capital structure. Results from Tables 4.23 to 4.25 indicated that all p-values were below 0.05. Therefore, the null hypothesis for both the primary data and the secondary data was to be dismissed. Hence the financial performance of NDTSACCOs in Kenya is substantially influenced by the capital structure.

The results of this study are in agreement with Esokomi and Mutua (2017), who established that the financial performance of SACCOs in Kakamega County in Kenya had a positive and statistically relevant association amid capital structure and income diversification. Muithya (2019) indicated that capital structure measured through internal and external funding increased the wealth of SACCOs. It also agrees with Shibtutse, Kalunde and Achoki (2016) who evaluated capital mix through dividend pay-out and liquidity, established that capital structure had a major influence on the financial success of SACCOs in Kenya. These results are in contradiction with those by Mwatu & Abdul (2018), who indicated a negative and important influence on the financial performance of SACCOs by capital structure.

5. Summary, Conclusions and Recommendations

5.1. Introduction

The review of the key observations, discussions, conclusions and recommendations from the study findings is provided in this chapter. The research aimed to assess how financial performance of SACCOs is influenced by capital structure. In this chapter, suggestions for further study are also given.

5.2. Summary

Majority of those who responded suggested that capital structure influences the financial performance of SACCOs. The results of the correlation indicated that the capital structure for both the primary and secondary data had a substantially and statistically positive association with financial performance. Regression analysis revealed that for both the primary and secondary data, there was a statistically important association between capital structure and financial performance. The results of the hypothesis showed that with regard to the primary data, there was a statistically relevant relationship between capital structure and financial performance. However, the hypothesis for the secondary data indicated that there was a positive but insignificant relationship between capital structure and financial performance measured through return on assets, net interest margin and operating profit margin of SACCOs in Kenya.

5.3. Conclusions

When the primary data on capital structure was subjected to descriptive analysis it revealed that capital structure had an influence on the financial performance of SACCOs in Kenya. These results were ascertained by the regression analysis results which showed that capital structure had a positive and substantial effect on SACCOs' financial performance. From the findings of the study, it can be concluded that an increase in capital structure by one unit would lead to an improvement in financial performance of SACCOs by 0.323 units.Capital structure was revealed by the regression results based on the secondary data to be having a positive but insignificant influence on financial performance measured through return on assets, net interest margin and operating profits margin. These results indicated that an improvement of capital structure by 1 unit would lead to an improvement of 0.134, 0.013 and 0.040 in financial performance measured through return on assets, net interest margin and operating profits respectively.

5.4. Recommendations

Pegged on the findings, the study recommended that SACCOs should improve on their capital structure through improving on their institutional capital. Be less reliant on borrowings from financial institutions as such borrowing are expensive and eventually led to reduction of available capital. The board members should therefore institute a good capital mix that would lead to improvement of the financial performance of the SACCOs.

5.5. Areas for Further Research

This study looked at four independent variables that is Capital structure, liquidity management, credit risk management and financial innovations and their effect on financial performance of Non-Deposit Taking Savings and Credit Cooperative Societies in Kenya. The researcher used closed ended questions with Likert Scale. It is suggested that a similar research be carried out using, both open and close ended questionnaires. It is also suggested that a similar study be carried out in other sectors like the manufacturing sector, the main stream financial institutions like the banks, Small and Micro Enterprises and on Deposit Taking SACCOs. A study can also be carried out using similar variables and non-financial measures.

6. References

i. Anarfo E. B., (2015) Capital Structure and Bank Performance – Evidence From sub- Saharan *Africa. European Journal of Accounting Auditing and Finance Research,3 (3).1-20.*

ii. Aslamah, A. N. (2019). Review artikel Analysis Factor of Capital Structure Property and Real Estate Companies in Indonesia. *Educational, Economic and Business Anthology*, *1*(3).

iii. Association of British Credit Unions Limited (2016, July). The History of Credit Unions.

iv. Retrieved from ABCUL: http//abcul.org/credit-unions/history-world-facts

v. Bhamornsathit, S., & Katawandee, P. (2016). An analysis of Thai listed hotels: Financial and operational performance. *Journal of Business and Behavioral Sciences*, *28* (2), 55.

vi. Buluma, Fred C. Obande, James Kung'u, and Francis Njuguna Mungai. (2017) Effect of SASRA regulations on financial performance of Nyandarua County's deposit taking SACCOs in Kenya. *International Journal of Economics, Commerce and Management* 5, no. 7

vii. Chom, V. (2017). Analysing the Cooperative Model for Startups.2017): 614-636

viii. Esokomi, E., & Mutua, M. (2018). Determinants of Financial Performance among Savings and Credit Co-Operative Societies In Kakamega County, Kenya. *International Journal of Finance and Accounting*, *3*(1), 1-19.

ix. Harlina, V. R., & Khoiruddin, M. (2018). Dividend Policy and Economic Variable to Stock Price Volatility: Comparison of Indonesia and Malaysia. *Management Analysis Journal*, *7*(4),506-515.

x. Hezron, R. O. & Muturi W. (2015) Effect of internal factors on performance of SACCOs in Kenya. *International Journal of Economics, commerce and management, 3* (7),767- 785.

xi. International Cooperatives Alliance (2018). What is a cooperative. Retrieved from http ://icacoop/en/what-co-operative- Islam,

xii. Kahuthu, D. G. (2016). *Impact of Prudential Regulation on Financial Performance of Deposit Taking Savings and Credit Cooperative Societies in Kenya* (Doctoral dissertation, COHRED, JKUAT)

xiii. Kahuthu, D. G., Muturi, W., & Kiweu, J. M. (2015). The Impact of Credit Management and Liquidity on financial performance of Deposit Taking Savings and Credit Cooperatives in Kenya.

xiv. Keben, T. K., & Maina, K. E. (2018) Effect of liquidity risk management on financial performance of deposit taking SACCOs in Uasin Gishu County Kenya. *International Academic Journal of Economics and Finance*, *3*(2), 323-335.

xv. Khambule, N. (2015). The impact of co-operative finance on household income: a case study of co-operatives in KwaZulu-Natal. *Unpublished PhD dissertation, Stellenbosch: Stellenbosch University* Kirimi,P.N. Simiyu, J. Murithi D. (2017). Effect of Debt Finance on Financial performance

xvi. of Savings and Credit Cooperative Societies in Maara Sub-county, Tharaka Nithi County, Kenya. *International Journal of Accounting, Finance and Risk Management 2017; 2(5): 113-130*

xvii. Kiragu, D. N. (2015). *Influence of financial innovations on financial performance of savings and credit co-operative societies in Nyeri County, Kenya*. Nairobi: University of Nairobi.

xviii. Ksoll, C., Lilleør, H. B., Lønborg, J. H., & Rasmussen, O. D. (2016). Impact of Village Savings and Loan Associations: Evidence from a cluster randomized trial. *Journal of Development Economics*, *120*, 70-85.

xix. Liu, Y., Hope, A., & Wang, J. (2018). Review of studies on the public–private partnerships (PPP) for infrastructure projects. *International Journal of Project Management*, *36*(5), 773-794.

xx. Mathuva, D. M. (2016). Drivers of financial and social disclosure by savings and credit cooperatives in Kenya: A managerial perspective. *Journal of Co-operative Organization and Management*, *4*(2), 85-96.

xxi. Martinez, L. B., Scherger, V., & Guercio, M. B. (2019). SMEs capital structure: trade-off or pecking order theory: a systematic review. *Journal of Small Business and Enterprise Development*.

xxii. McKillop, D. G. & Wilson, J. O. (2015). Credit Unions as Cooperative Institutions: Distinctiveness, Performance and Prospects. *Social and Environmental Accountability Journal*, 35, 96-112

xxiii. Modigliani F, Miller M (1958), *The cost of capital, corporation finance and the theory of investment,* American Economic Review, 45(48), 261-9

xxiv. Muithya, V. K. (2019). *Internal factors affecting growth of savings and credit cooperative societies in Machakos County, Kenya* (Doctoral dissertation).

xxv. Mutai, F. C. (2016). *Selected Factors Influencing Financial Performance of Savings and Credit Cooperative Societies in Kenya: A Survey of Deposit Taking SACCOs in Kericho County* (Doctoral Dissertation, Kabarak University)

xxvi. Mwatu M. D.& Farida A. (2018) Capital Structure and the Financial Performance of Deposit-Taking Savings and Credit Cooperative Societies in Kenya. *International Journal of Current Aspects in Finance (IJCAF), Volume IV, Issue II, May 2018, PP 71- 88, ISSN 2616-6976*

xxvii. Mwizarubi M, Kumar R.,Mnzava B and PrustyS. (2016) Financing Alternatives for SACCOS and their Impact on Financial Performance: Evidence from Tanzania. *The Researcher- International Journal of Management Humanities and Social Sciences July-Dec 2016, 1(2)*

xxviii. Ngeno, J. C. (2019). *Capital adequacy framework, funds allocation strategy and financial performance of deposit taking Sacco's in Kenya* (Doctoral dissertation, KeMU).

xxix. Ngure F.K (2017) Product Innovations and Financial Performance of Savings and Credit Co-Operatives Societies In Kirinyaga County, Kenya. *International Academic Journal of Human Resource and Business Administration | Volume 2, Issue 3, pp. 166- 178*

xxx. Njenga, R., & Jagongo, A. (2019). Effect of financial management decisions on financial performance of selected non-deposit taking SACCOs in Kiambu County, Kenya: Theoretical Review. *International Academic Journal of Economics and Finance*, *3*(3), 204- 217.

xxxi. Njeru, M. D. (2016). *Effect of Liquidity Management on financial performance of Deposit Taking Saving and credit co-operative society in Kenya* (Doctoral dissertation, Business Administration (Finance),JKUAT).

xxxii. Nkuru, F. N. (2015). Factors Affecting Growth of SACCOS within the Agricultural Sector in Kenya: A Case of Meru Farmers SACCOs. *Global Journal of Commerce & Management Perspective*, *4*(1), 34-45.

xxxiii. Ochieng I.A., Bogonko, J. & Simiyu R**.** (2017). The influence of liquidity of a portfolio on the financial performance of SACCOs in Kenya. *International Journal of Commerce and Management Research ISSN: 2455-1627 Volume 3; Issue 9; September 2017; Page No. 52-57*

xxxiv. Ochingo M.A. & Muturi W.M. (2018) Effect of firm characteristics on financial performance of Savings and Credit Societies in Kenya. *Strategic Business and change Journal of Management Vol 5,issue 1 pp769-784.*

xxxv. Odhiambo, S. P. O., (2018). Determinants of Financial Performance of Savings and Credit Cooperative Societies in Nakuru Town, Kenya. *Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 20, Issue 8. Ver. VI , PP 36-45*

xxxvi. Okelo, C. (2015). *Determinants of financial risk of listed companies on the Nairobi Securities Exchange in Kenya.* PhD project, Jomo Kenyatta University of Agriculture and Technology.

xxxvii. Omar, N.A. (2017) *Influence of Financial Management Practices on the Growth of Family Business in Kenya.* PhD Thesis Jomo Kenyatta University of Agriculture and Technology.

xxxviii. Ondieki, A. N., Okioga, C., Okwena, D. K., & Onsase, A. (2017). Assessment of the Effect of External Financing on Financial Performance of Savings and Credit Cooperatives in Kisii Central District, Kenya.

xxxix. Onyango, J. A. (2016). *The Effects of External Financing on The Growth of Savings and C redit Co-Operative Societies' Wealth in Nairobi County, Kenya* (Doctoral dissertation, United States International University-Africa).

xl. Ozili, P. K. (2018). Banking stability determinants in Africa. *International Journal of Managerial Finance*.

xli. Rehman, O. U. (2016). Impact of capital structure and dividend policy on firm value. *Journal of Poverty, Investment and Development*, *21*(1), 40-57.

xlii. Shibutse, Robert, Elizabeth Kalunda, and George Achoki. Effect of Liquidity and Dividend Payout on Financial Performance of Deposit Taking SACCOs in Kenya. (2019).

xliii. Siddik, M., Alam, N., Kabiraj, S., & Joghee, S. (2017). Impacts of capital structure on performance of banks in a developing economy: Evidence from Bangladesh. *International journal of financial studies*, *5*(2), 13.

xliv. Tonui, C. K., & Otinga, H. N. (2019). Effect of financial management practices on financial performance of savings and credit cooperative societies in Kisumu County, Kenya. *The Strategic Journal of Business & Change Management*, *6*(1), 699-718.

xlv. Wamiori G.M (2019). Determinants of Financial Performance of Manufacturing Firms in Kenya. PhD Thesis Jomo Kenyatta University of Agriculture and Technology.

xlvi. Wanjiru, J. W. (2017). The Effect of Credit Risk Control on Financial Performance of Commercial Banks in Kenya. *Unpublished MBA Research Project*.

xlvii. Wanyama, F. O. (2016). Surviving liberalization: the cooperative movement in Kenya

xlviii. Zainudin, R., Mahdzan, N. S., & Yet, C. H. (2018). Dividend policy and stock price volatility ofindustrial products firms in Malaysia. *International Journal of Emerging Mar*