

**EFFECTS OF FINANCIAL RESTRUCTURING ON FINANCIAL PERFORMANCE OF
DEPOSIT TAKING SACCO'S IN NAIROBI COUNTY**

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DECLARATION

This dissertation is my original work and has not been presented for research for degree award in any other university.

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Supervisor Declaration

This dissertation has been submitted for examination with my approval as University Supervisor.

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DEDICATION

This dissertation is dedicated to my beloved wife and children.

ACKNOWLEDGEMENT

I give thanks to the Almighty God who gave me the knowledge, strength and wisdom to go through this dissertation; it won't have been possible without His approval. I sincerely thank my Supervisor Fiona Jepkosgei for the guidance throughout the dissertation.

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OPERATIONAL DEFINATION OF TERMS

- Deposits Restructuring:** Involves aligning the minimum member contributions while aiming to increase the working capital for the Sacco's (Nasrin, Rasiah & Masud, 2018).
- Equity Restructuring:** Transaction between a corporation and its shareholders that alters the fair value of the shares associated with an option or similar reward (Raposo & Lehmann, 2019).
- Debt Restructuring:** Process used by institutions to avoid the risk of default on existing debt or to take advantage of lower available interest rates (Kim, Ko & Wang, 2019).
- Financial Performance:** Ability of the financial institution management to generate income by utilizing company assets at their disposal (Haber & Reichel, 2015)

ABBREVIATION AND ACRONYMS

CLRM: Classical Linear Regression Model

DTS: Deposits Taking Sacco's

MFIs: Micro-Finance Institutions

ROA: Return on Assets

ROE: Return on Equity

ROI: Return on Investment

SACCO's: Savings and credit cooperatives

SASRA: Sacco Societies Regulatory Authority

SMEs: Small and medium-sized enterprises

VIF: Variance inflation factor

ABSTRACT

Sacco's are the key microfinancing institutions for mobilization of financial resources for various development activities and where instability in the Sacco's exist, financial restructuring is key in turning it round to stability and profitability. This study investigated the effects of financial restructuring on the financial performance of deposit taking Sacco's in Kenya. The objectives included undertaking an in-depth study based on debt, equity, deposits restructuring. Loanable funds Theory, Liquidity Preference Theory and Pecking Order Theory informed the study. This study was based on 39 deposit taking Sacco's in Nairobi County. This study covered a 10 year period from 2010 to 2019. A descriptive research design was adopted. The research adopted the use of secondary data. The secondary data was obtained from SASRA registry comprising of audited financial statements submitted by the deposit-taking SACCOs. This study used autocorrelation tests, heteroscedasticity tests, multicollinearity tests, normality assumptions and Hausman test to evaluate the data collected before the actual analysis. STATA software was used to conduct the analysis. The findings indicated that a positive and significant relationship between Debt restructuring and return on assets for the deposit taking Sacco's in Nairobi County. There was a positive and significant relationship between Equity restructuring and return on assets for the deposit taking Sacco's in Nairobi County. Deposit restructuring had a negative and significant relationship with return on assets for the deposit taking Sacco's in Nairobi County. This implied that an increase in debt restructuring, equity restructuring and deposit restructuring leads to a significant increase on return on assets for the deposits taking Sacco's in Nairobi County. The study concluded that there is a strong correlation between debt restructuring, equity restructuring and deposit restructuring on return on asset for the deposit taking Sacco's. The study recommends that the Sacco management should raise their lending capacity by seeking controlled external borrowing to raise their immediate cash for lending when in distress. However the external borrowing should be controlled to avoid increasing in debts as compared to the total assets. The Sacco management should maintain their core capital as a Sacco reserve. The study recommends that the Sacco management should formulate a mechanism to raise their lending capacity by periodically increasing their minimum member deposits. This will increase the liquid cash for lending which is the core activity of the Sacco. However the minimum deposit should be structured to accommodate all classes of the depositors to avoid discouraging the members.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

The chapter presents the background of the study, the problem statement, research objectives and hypothesis. In addition, the chapter presents the justification of the study, significance and scope of the study.

1.1 Background of the study

Savings and credit cooperatives (SACCO's) are cooperative financial institutions that are owned and controlled by its members and operated for the purposes of promoting savings, providing credit at low interest rates and providing other financial services to its members (SASRA, 2019). SACCOS are the important microfinancing institutions for mobilization of financial resources for various development activities. For the deposit taking Sacco's, their financial stability entails their ability to absorb financial shocks and continue with normal operation even in the face of a dynamic and challenging environment such as market tribulations and competition from other financial institutions (Ombaka & Jagongo, 2018). Where instability in the Sacco's exist, financial restructuring is key in turning it round to stability and profitability.

A majority of deposit-taking Sacco's in Kenya are experiencing financial instability. Among the challenges Sacco's are facing include failure to meet and maintain prudential standards especially the liquidity ratio and capital adequacy ratio, liquidity constraints making it impossible to issue new loans and plunging them deeper into loss making (SASRA, 2018). The problem is compounded by the new stringent IFRS9 financial reporting standards that have hit all deposit-taking Sacco's further squeezing earnings. Under IFRS9, capital adequacy, asset quality, earnings and liquidity remains key criteria for monitoring, evaluating and measuring the financial soundness and stability of Sacco's.

An increasing number of Kenyan Sacco's are reeling under the weight of bad loans and mismanagement that have put the Sh1 trillion sector on a path of instability that if not reversed could have damaging contagion on the entire economy (State department of Co-operatives, 2018). At stake are hundreds of billions of shillings of members' savings that have either been lost or are at risk of being lost as more and more cases of financially troubled Savings and Credit Co-operative

Societies come to the fore. For instance, Mwalimu, Ekeza and Stima Investment Co-operative, are together estimated to have lost their members funds upwards of Sh3.6 billion (SASRA, 2018).

Financial restructuring is the process of reshuffling or reorganizing the financial structure, which primarily comprises of equity capital and debt capital. Financial restructuring can be done because of either compulsion or as part of the financial strategy of the company (Gabbard, 2018). The general function in that financial restructuring is the reorganization of the financial assets and liabilities of a corporation in order to create an advantageous financial environment for a corporate entity (Kibet, 2015). The financial restructuring can be either from the assets side or the liabilities side of the balance sheet where if one is changed the other was adjusted (Sarpong, 2018).

The process of reorganizing the whole debt capital of an institutions known as debt restructuring. It is the adjustment of debt components of the company as some of the balance sheet items (Messomo, 2017). The components of debt restructuring are, restructuring of secured long term borrowings which is done for improving liquidity, increasing the cash flows for a sick company and for reducing the cost of capital for healthy companies (Reed, 2019). The restructuring of long-term unsecured borrowings is done depending on the type of borrowing. These borrowings can be public deposits, private unsecured loans and privately placed, unsecured bonds or debentures (Kisgen, 2016).

The reasons for equity restructuring are for raising fresh finance, to maintain debt-equity ratio, to write off unrecognized expenditure, to wipe out accumulated losses, reorganizing the capital for achieving better efficiency, to provide respectable exit mechanism for shareholders in the time of depressed markets by providing them liquidity through buy back and for correction of over capitalization (Dato, Mersland & Mori, 2018; Kumar & Venai, 2012). Therefore, financial restructuring is any substantial change in a company's financial structure, or ownership or control, or business portfolio, designed to increase the value of the firm.

Metropolitan Sacco in Kenya for instance restructured the Sacco's funding requirements to better manage members' monthly loan demands as well as the overall liquidity flows. The Sacco sought Coop Bank's corporate guidance after being hit by financial constrain caused by high non-performing loans (Metropolitan Sacco, 2019).

1.1.1 Financial Restructuring

The Sacco's may need to reorganize its financial assets in order to create the most financially beneficial environment for the company (Colliard & Gromb, 2018). This will in turn lead to an increase in the value of these Sacco's. In order to remain competitive and grow profitability, financial institutions have been aggressively trying to build new competencies and capabilities (Mantravadi & Reddy, 2018). One of the most high profile features of the globalized business and investment world is financial restructuring; it embraces many things in addition to debt, equity and deposit restructuring (Adekunle & Sunday, 2019).

In India, Kaur and Srivastava (2017) determined that debt restructuring improved the profitability of the micro financial institutions to the level equivalent to their industry peers. Mantravadi and Reddy (2018) portrayed a weak correlation between the Sacco's debts in relation to financial performance. Bedendo, Cathcart and El-Jahel, (2016) on the other hand presented a positive relationship between debt restructuring and financial performance of the deposit taking Sacco's. In Nigeria, the study by Adepoju, Salau and Obayelu (2017) established that the effects of debt reorganization had a weak correlation with financial performance of the Sacco's. Locally, Kibet (2015) posited that debt restructuring has been championed as an effective way to improve the firm's chances of paying back the obligations as the creditors understand that they would receive even less should the company be forced into bankruptcy and/or liquidation.

According to Crabb (2017), equity restructuring provides adequate capital for the provision of working capital and some of the equity instruments are altered in a restructuring are a rights offering, split, or dividend. Rastogi and Mazumdar (2017) on the impact on equity restructuring in Pakistan, observed that it presents a negative effect with financial performance when intervened by external debts. Obokoh, Monday and Ojiak (2016) established that equity restructuring in the by dimensions of core capital had a weak effect on profitability over the long run. Locally, Njambi, and Kariuki (2018) asserts that equity restructuring on retained earnings have a positive effect on the financial stability of financial institutions.

In Indonesia, the study by Sato (2015) on the relation between deposits restructuring and financial performance of Sacco's, deduced a positive and significant relationship. In Bangladesh, Nasrin, Rasiah and Masud (2018) found that deposit restructuring significantly informed financial performance in the small lending organizations. Omeje (2017) in Nigeria also found that raising

the minimum deposit for the Sacco had a positive effect on performance since it increased the working capital for the Sacco's. Locally, Ombaka and Jagongo (2018) found that Sacco member deposits had a strong positive correlation with performance of deposit taking Sacco's. By providing services to members and customers of different income groups, deposit taking Sacco's accumulates deposits which are stable, low cost source of financing for the growing loan portfolios. These finances are lent to members to invest in productive investments in agriculture, education, housing, and small businesses in the rural and urban areas (Waithaka & Kimencu, 2018). Harwood, Nakola and Nyaana (2016), examined the importance of member deposits and savings in deposit taking Sacco's and indicated that voluntary savings is for the provision of loan services.

1.1.2 Financial Performance

According to Pollet (2013), financial performance forms an important part of the Sacco's business and it is crucial for their survival. Successful financial performance in the Sacco's has a positive association with the capacity to manage financial issues effectively. Haber and Reichel (2015) provide evidence of a positive association between financially related activities and the successful financial performance of Sacco's. Mbonyane (2016) finds that financial performance as the life blood of small-scale organizations, since without them, no growth decisions can be made. Financial performance for Sacco's is crucial since managers need to know how well the Sacco's are performing (Adekunle & Sunday, 2019). On relationship, Kibet (2015) established a positive relationship between equity financing and financial performance of Sacco's in Kenya. On performance of Sacco's, SASRA report in 2018 indicated that savings and credit co-operative societies had been facing low financial performance.

The major reasons as to why Sacco's have financial performance measurement is to produce financial statements at the right time and that financial statements should be analyzed to produce information about the performance of the Sacco, which must be used to improve that performance (Kisgen, 2016). Profitability ratios are often used in a high esteem as the indicators of credit analysis in Sacco's, since profitability is associated with the results of management performance.

Different stakeholders evaluate the company performance from different perspective. We have shareholders, managers, creditors, tax authorities and other users who have interest in performance of a company. Shareholders will invest in an institution to generate value for their investment.

Efficiency use of resources by institution is key aspect by the management to attain good financial performance (Kisgen, 2016). To evaluate financial performance of an institution, financial statements are used where different ratios are performed as per requirement of the user.

Some of the commonly used financial performance measures are profit after tax, Return on Assets (ROA), Return on Equity (ROE) and earnings per share. There are performance measurement used in accounting that entail Return on Assets (ROA), Return on Equity (ROE), Return on Investment (ROI), market share, market growth and profitability. They are used in accounting standards where these financial metrics are evaluated with regards to past metrics, current metrics and the projected metrics (McLeay, 2015; Floyd & List, 2016).ROA is a ratio of income to its total asset (Khrawish, 2011). It measures the ability of the financial institution management to generate income by utilizing company assets at their disposal. In other words, it shows how efficiently the resources of the company are used to generate the income. It further indicates the efficiency of the management of a company in generating net income from all the resources of the institution (Khrawish, 2011). Wen (2010), state that a higher ROA shows that the company is more efficient in using its resources. This study used Return on Assets (ROA) as the measure for financial performance of the deposit taking savings and credit cooperative societies.

1.1.3 Profile of the Deposit Taking Sacco's

Deposit taking Sacco's are authorized to take deposits from and lend to its members. Sacco's are governed by the Sacco's bylaws, which state the objectives, membership, share capital, organization structure, management and lending regulations. The Sacco's Societies Regulatory Authority (SASRA) regulates the sector. Most Sacco's are managed by a professional management team, which reports to a committee elected by members annually or according to the bylaws of the Sacco's. Most Sacco's in Kenya have restricted membership to industry or sector of working (SASRA, 2019).

Kenya has over 17,000 registered cooperatives and deposit taking Sacco's (SASRA, 2018). Majority of the Sacco's are based in Nairobi County, as it is the country's financial hub. According to SASRA (2018) report, there are 39 licensed deposits taking Sacco's (DTSS) in Nairobi County as at end of 2018. In addition to providing employment opportunities, Sacco's create income for the youth, farmers and the low-income earners. In Kenya, Sacco's comprises over 50% of all cooperatives, and as financial institutions they play a critical role of financial intermediation in the

financial landscape focusing mostly on personal development (SASRA, 2018). The Sacco's are found in almost all sectors of the economy and about 80% of the Kenyan population derives their income either directly or indirectly through Sacco's initiatives.

The study used deposit taking Sacco's in an effort to determine the factors that impact on their financial structures geared towards financial performance. The study used deposit taking Sacco's as they are licensed to receive money on deposit from private individuals and to pay interest on it. Thus, their growth has had an overall positive economic impact on the individual members of these Sacco's and national economy in general. Nairobi County was chosen as it is the financial headquarter of most of the deposit taking Sacco's in the country and most of them are also based in Nairobi County.

1.2 Statement of the Problem

A majority of deposit-taking Sacco's in Kenya are experiencing financial instability and this is worsened by the challenges in meeting and maintaining prudential standards. These standards are based on debts, equity, capital and the liquidity ratios thus making it impossible to issue new loans and plunging them deeper into loss making (SASRA, 2018). According to the IFRS9, asset quality, earnings and liquidity remains key criteria for monitoring, evaluating and measuring the financial soundness and stability of Sacco's. However, the Sacco's regulators points that many Sacco's have fell short of these requirements. For instance, according to the Sacco Societies Regulatory Authority 2018 report, a fraction of Sacco's have had to rework on restricting their capital and operations with the aim of regaining profitability (SASRA, 2018). Further, the existence of significant capital structure constraints on the growth of Sacco's programs remains a tough challenge facing the Sacco's (Ombaka & Jagongo, 2018).

In addition, SASRA report in 2018 indicated that savings and credit co-operative societies had been facing low financial performance pointing from insufficient capital base and inefficient loan pricing strategies (SASRA, 2018). The report indicated that in 2018, more than 100 deposit-taking savings and credit co-operatives country wide did not meet the mandatory capital ratio requirement in 2017, raising questions over their fitness in the key credit market. Following the financial reform process in Kenya, there has been an increasing growth in the non-performing assets and this has significantly interfered with development in the financial area this has impacted negatively on the general national economy (Mumanyi, 2018; Njagi, Maina & Kariuki, 2017).

Various studies have examined the effect of restructuring on Deposit taking Sacco's in Kenya but none of them focused on financial restructuring since they studied capital restructuring. Ondieki and Onsase (2017) assessed the effect of external borrowing on financial performance of SACCOs. Ondieki *et al.* (2018) however, did not consider the effect of internal finances such as member contributions and member deposits. Mwenda and Kalio (2017) investigated the determinants of capital structure and the effect of capital structure on the profitability of SACCOs while the current study focused on financial restructuring. These studies fail to address the financial restructuring aspect but instead are focusing on capital restructuring. Mwithiga (2012) while analyzing the strategic responses adopted by SACCOS to the changing operation environment in the Kenyan financial sector adopted restructuring strategies, diversification strategies, differentiation strategies, monitoring and evaluation strategies. However, the measurement was informed by use of questionnaires while current study used secondary financial data therefore presenting a methodological gap.

Therefore, the impact of Sacco's financial structure and its composition on financial performance, whose knowledge largely misses in the literature, constitutes a knowledge gap in Kenya hence studying the arena is of significance.

1.3 Research Objectives

1.3.1 General Objective

The general objective of the study was to investigate the effects of financial restructuring on the financial performance of deposit taking Sacco's in Kenya.

1.3.2 Specific Objectives

This study examined the following specific objectives:

- i. To determine the effect of debt restructuring on the financial performance of deposit taking Sacco's in Kenya
- ii. To evaluate the effect of equity restructuring on financial performance of deposit taking Sacco's in Kenya
- iii. To examine the effect of deposit restructuring on financial performance of deposit taking Sacco's in Kenya

1.4 Research Hypotheses

This study tested the hypotheses given below;

- i. Debt restructuring has no significant effect on the financial performance of deposit taking Sacco's in Kenya
- ii. Equity restructuring has no significant effect on financial performance of deposit taking Sacco's in Kenya
- iii. Deposit restructuring has no significant effect on financial performance of deposit taking Sacco's in Kenya

1.5 Justification of the Study

Sacco's are the important microfinancing institutions for mobilization of financial resources for various development activities. Undertaking this study, is relevant as the findings will be used by various stakeholders to assess the Sacco's positioning on its financial structures. The study also anticipates that the findings of the study will support management in discovering new and better techniques of improving and running their operations in order to improve their financial performance as far as debt, equity, deposits are concerned.

1.6 Significance of the Study

1.6.1 Management of SACCOs

To Sacco's management and directors, the study will provide an insight into the various approaches towards the optimal financial structures aimed at financial performance in the sector. Knowledge of contemporary financial management techniques will enable them identify plan, control and effectively manage Sacco's to enhance success.

1.6.2 Government

The findings for research will be used to assist in policy formulation regarding turnaround and other regulatory requirements of Sacco's in the country. The policy maker will better understand how well to incorporate the financial structures effectively to ensure its full participation.

1.6.3 Shareholders

The findings will create some basic awareness to the shareholders and will help them in understanding the circumstances under which the Sacco's operate and hence will reduce conflict between shareholders and management.

1.6.4 Future Researchers

Academicians and researchers will be furnished with relevant information regarding financial performance in savings and credit cooperative societies. The findings will stimulate other researchers to venture into financial restructuring of the Sacco's that have not been studied. This will contribute to the general body of knowledge and will form a basis for future research.

1.7 Scope of the Study

The study focused on the effects of financial restructuring of deposit taking Sacco's in Nairobi County. This involved undertaking an in-depth study based on debt, equity, deposits. This study was based all the savings and credit co-operative societies in Nairobi County to make it representative. This data covered a 10 year period from 2010 to 2019 to enable panel data analysis.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter discusses theories relevant to the study. The concept of the study is developed under the conceptual framework section and finally reviews of empirical studies that have previously been conducted on the area of financial restructuring and financial performance.

2.1 Theoretical Review

The theoretical framework is the structure that can hold or support a theory of a research study. It introduces and describes the theory which explains why the research problem under study exists. Loanable funds Theory, Liquidity Preference Theory and Pecking Order Theory informed the study. The anchoring theory was Loanable funds Theory.

2.1.1 Loanable funds Theory

Economists Ohlin and Viner proposed the loanable funds theory in 1937. According to this theory, rate of interest is determined by the demand for and supply of loanable funds. The loanable funds doctrine extends the classical theory, which determined the interest rate solely by saving and investment, in that it adds bank credit (Lindner, 2013).

The total amount of credit available in an economy can exceed private saving because the bank system is in a position to create credit. Hence, the equilibrium (or market) interest rate is not only influenced by the propensities to save and invest but also by the creation or destruction of fiat money and credit (Bibow, 2011). According to this approach, the interest rate is determined by the demand for and supply of loanable funds. The term loanable funds includes all forms of credit, such as loans, bonds, or savings deposits (Thomas, 2018).

According to loanable funds theory, equilibrium rate of interest is that which brings equality between the demand for and supply of loanable funds (Jakab & Kumhof 2015). The equilibrium interest rate is determined at a point where the demand for loanable funds curve intersects the supply curve of loanable funds. Loanable funds is the sum total of all the money people and entities in an economy have decided to save and lend out to borrowers as an investment rather than use for personal consumption (Thomas, 2018). The theory of loanable funds uses a classical market

analysis to describe the supply, demand, and interest rates for loans in the market for loanable funds.

If the bank system enhances credit, it will at least temporarily diminish the market interest rate below the natural rate. Wicksell had defined the natural rate as that interest rate which is compatible with a stable price level. Credit creation and credit destruction induce changes in the price level and in the level of economic activity. This is referred to as Wicksell's cumulative process (Lindner, 2013). The theory is based on the following simplifying assumptions; That the market for loanable funds is one fully integrated (and not segmented) market, characterized by perfect mobility of funds throughout the market; That there is perfect competition in the market, so that each borrower and lender is a 'price-taker' and one and only one pure rate of interest prevails in the market at any time. The forces of competition are also supposed to clear the market pretty fast, so that the single rate of interest is the market-clearing (or the equilibrium) rate of interest (Bibow, 2011).

The theory is relevant to the study on the debt and equity restructuring to generate more credit for lending which is the key role of the Sacco's. Since the supply of loanable funds is based on savings and the demand for loanable funds is based on borrowing, the interaction between the supply of savings and the demand for loans determines the real interest rate and how much is loaned out. The equilibrium interest rate is determined at a point where the demand for loanable funds curve intersects the supply curve of loanable funds. This thus provides key structure during restructuring in debt, equity and assets of the Sacco's.

2.1.2 Liquidity Preference Theory

The Liquidity Preference Theory was introduced by English economist John Maynard Keynes in his 1936 book, *The General Theory of Employment, Interest, and Money*. Keynes called the aggregate demand for money in the economy liquidity preference. The Liquidity preference theory suggests that an investor should demand a higher interest rate or premium on securities with long-term maturities that carry greater risk because, all other factors being equal, investors prefer cash or other highly liquid holdings. Under the Theory of Liquidity Preference, an investor faced with two assets offering the same rate of return will always choose the more liquid asset (Bibow, 2013).

According to the theory, the short-term interest rate is determined by the supply and demand for money (Chick & Dow, 2012). The demand for money is a function of the short-term interest rate

and is known as the liquidity preference function. Money supply is usually a fixed quantity set by a central banking authority. According to the Theory of Liquidity Preference, the short-term interest rate in an economy is determined by the supply and demand for the most liquid asset in the economy – money. According to the liquidity preference theory, interest rates on short-term securities are lower because investors are not sacrificing liquidity for greater time frames than medium or longer-term securities (Carvalho, 2015).

According to Keynes, there are three motives behind the desire of the public to hold liquid cash: (1) the transaction motive, (2) the precautionary motive, and (3) the speculative motive. First, the transactions motive states that individuals have a preference for liquidity in order to guarantee having sufficient cash on hand for basic day-to-day needs (Cardim, 2010). In other words, stakeholders have a high demand for liquidity to cover their short-term obligations, such as buying groceries, paying rent and/or the mortgage. Higher costs of living mean a higher demand for cash/liquidity to meet those day-to-day needs (Carvalho, 2015).

Second, the precautionary motive relates to an individual's preference for additional liquidity in the event that an unexpected problem or cost arises that requires a substantial outlay of cash. These events include unforeseen costs like house or car repairs. Third, stakeholders may also have a speculative motive. When interest rates are low, demand for cash is high and they may prefer to hold assets until interest rates rise. The speculative motive refers to an investor's reluctance to tying up investment capital for fear of missing out on a better opportunity in the future (Boulding, 2014).

The liquidity preference theory is relevant to the study on deposit restructuring of the Sacco's to avail the liquid cash that is key for lending to the customers. Where the liquid money is not available for lending, this affects the day to day operations of the Sacco's. The Sacco's become distressed if they lack the necessary credit for lending and thus the theory brings the relevance of the motives to have the liquid credit for lending.

2.1.3 Pecking Order Theory

The pecking order theory was initiated by Donaldson (1961) and developed further by Myers and Majluf (1984). The theory posits that firms have a hierarchy when it comes to raising capital. They will prefer internal finance which consists of retained earnings rather than external sources of finance which consists of debt and newly issued equity shares. In the event the internal finance is

insufficient the firm will prefer debt capital while newly issued equity capital was the least preferred source. The theory implies lack of a well-defined optimal capital structure.

A simple explanation of the rationale behind the preferences is that retained earnings incur no flotation costs and saves the firm from a lot of disclosure requirements that may lead to competitive disadvantage (Kishore, 2009). Retained earnings are also easily accessible and do not involve a lot of negotiations with third parties such as banks (Watson & Head, 2016). When it comes to external finance, the costs of issuing new debt is relatively lower than the cost of issuing new equity (Brigham & Houston, 2012). According to Watson and Head (2016) debt is more flexible since one can easily raise small amounts of debt and the issue of debt avoids the potential ownership problems associated with the issue of new equity.

A more complex explanation of the pecking order theory is provided by Myers and Majluf (1984) and it is based on the concept of asymmetric information. Asymmetric information refers to a situation in which the firm managers have more information about the company operations and future prospects than investors or lenders do (Gitman & Zutter, 2013). The higher the level of information asymmetry the higher the uncertainty which leads to a higher cost of financing. Retained earnings have the least level of information asymmetry as they are in the control of managers thus was the cheapest financing source. Debt-holders have less information asymmetry than providers of new equity, debt will therefore be cheaper than equity. The implication is that based on the cost of financing, managers will initially rely on retained earnings and in the event it is not enough they will turn to debt and then issue equity as a last option.

According to Myers and Majluf (1984), profitable firms are able to generate more retained earnings which they can use to finance their operations thus reducing their need for debt. The theory suggests that if the firm issues equity shares to finance a project, it has to issue shares at less than the prevailing market price. This signals that the shares are overvalued and the management is not confident to serve the debt if the project is financed by debt.

The theory is relevant to the study on restructuring through debt, equity and deposits during raising capital for the distressed Sacco's. The theory provides models for raising capital through the order of internal funds, debt and new equity. The Sacco's should prioritize their sources of financing, first preferring internal financing, and then debt, lastly raising equity as a last resort.

2.2 Empirical Review

This section reviews studies previously done on financial restructuring on financial performance. The literature review was categorized on debt restructuring, equity restructuring and deposits on financial performance.

2.2.1 Debt Restructuring and Financial Performance

Kibet (2015) carried out a study to establish whether there was a relationship between debt restructuring and profitability of MFIs in Kenya. This study used descriptive statistics. The study found that the financial structure decision is crucial for any business organization. The decision is important because of the need to maximize returns to various organizational constituencies, and also because of the impact such a decision has on an organization's ability to deal with its competitive environment. From the findings the study found that most of MFIs in Kenya were using equity and or donations as their main source finances in Kenya which accounted for by 72.42% and 27.58% in form of debt. The study further found that there exist a positive relationship between equity financing and profitability of MFIs in Kenya.

Silva (2018) on the effect of debt structure on MFIs performance; the objective was to determine the effects of capital restructuring on MFIs performance in Kristiansand. The study found that total debt and short term debt ratio impacts positively and significantly on ROE while negatively and significantly on ROA. Long term debt ratio had a positively and significantly impact ROE but not significantly impact on ROA of MFIs. This shows that if MFIs use long term debt to finance their operations, there may not be a pressure on management of MFI. This further suggests that profitable MFIs depend more on long term debt financing. The study uses a dataset which consists of 290 MFIs from 61 countries. This indicated that ROA and ROE was used as performance indicators, while debt to equity, long term debt to equity, short term debt to equity, debt to assets, long term debt to assets and short term debt to assets ratios are used as indicators of financial structure of MFIs.

Kyereboah- Coleman (2017) conducted a study consisting of a data-set of 290 MFIs, and found that most of the micro-financing firms incorporate more of debt-financing in their structures (long term debt in particular). The findings also propose that debt-financing enables the micro-financing firms to better reach a larger number of customers and experience greater economies of scales, allowing MFIs to better cope with moral hazards and tough situations. The findings also conclude

that the ratio of total-debt to short-term-debt significantly negatively impacts the ROA, while significantly positively affecting the ROE; strongly suggesting that profitable MFIs rely more on the long-term debt financing.

Kehinde (2012) in his study conducted between 2010 and 2012 examined the relationship that exists between the debt structure of the SMEs and the overall performance of the firms over the years in Nigerian. The study made use of questionnaire a survey method for data collection and chi-square a non-parametric method for data analysis. The study revealed that most SMEs have an all equity finance structure and has a less debt finance compared to equity finance. It also revealed that the earning, survival and performance of the SMEs is strongly influenced by their financial structure mix.

Obokoh and Ojiako (2016) in an attempt to investigate the relationship between debts-to equity ratio and firm's profitability, taking into consideration the level of firms' investment and the degree of market power found that there is negative and statistically significant relationship between debt-to-equity ratio and profit margin. The negative sign indicated that either the cost of borrowed capital is higher than its benefit from investment, or that firms financed by retained profits are more profitable than those financed by borrowed capital. The negative relationship between the financial variable and the profit margin was in line with the results of Baker (1973), Hurdle (1974) and Oustapassidis (1998).

In a study to examine the impact of financial structure on the performance of firms, Adekunle and Sunday (2019) used debt ratio to proxy financial structure while return on asset and return on equity were used as measures of firms' performance. The study used the Ordinary Least Squares method of estimation. The result of the study indicated that debt ratio has a significant negative impact on the firm's financial measures of performance. The study, however, did not consider other financing decisions in the analysis, including the mediating effect of internal cash flow available.

Frank and Goyal (2017) observed that profitable firms tend to retire their debt and maintain leverage close to the lower end, whereas loss making firms are found to have higher debt level and are close to the higher limit of debt ratio. This indicates that profitability may also reflect the growth aspect of firms. This suggests that firm performance and leverage may be negatively related. Accordingly, profitable firms are likely to use retained earnings and make less use of debt

relative to less profitable firms. It implies firm's performance and debt are expected to be negatively associated.

Hadlock and James (2012) argued that provided that earning power of firms exceed leverage interest cost of debt, financial leverage will have a positive effect in firms return on equity. They further argued that the extent to which a firm's earnings' power is likely to remain above the breakeven point and the potential speed or flexibility with which it can adjust its debt usage, if its earnings' power falls below average interest costs, should help to determine the level of debt that the firm is willing to commit itself to at a given point in time.

According to Anthony (2017), since debt sales bring additional cash into the firm, this could exacerbate agency problems. Alternatively, if firms use the debt issue proceeds to address the gap between investments needs and internal sources of funding, this would not necessarily lead to an increase in excess cash within the firm. The periodic interest payments on debt would then commit managers to pay out excess free cash flow. Hence, debt issues could reduce agency costs, and have positive effects on firm value and performance.

Weinraub and Visscher (2018) in their study on debt financing suggest that aggressive liquidity policy combine the higher levels of normally lower cost short-term debt and less long-term capital. Although capital costs are reduced, this increases the risk of a short-term liquidity. They established that total and short term debt is positively related to firm's profitability, which might be the most important factor in accessing outside financing in countries with weak collateral laws. From their studies they also found out that a negative relation between tangibility and short-term debt and a positive relationship between tangibility and long-term debt exists. These results are consistent with most theories on financial structure that suggest that firms without fixed assets to use for collateral are unable to access long-term financing.

According to Teruel and Solano (2017), short-term debt is positively correlated with firm's growth opportunities. The anecdotal evidence suggests that there is a positive relationship between short term debt financing and financial performance. Frank and Goyal (2017) observed that profitable firms tend to retire their debt and maintain leverage close to the lower end, whereas loss making firms are found to have higher debt level and are close to the higher limit of debt ratio. This indicates that profitability may also reflect the growth aspect of firms. This suggests that firm performance and leverage may be negatively related. Accordingly, profitable firms are likely to

use retained earnings and make less use of debt relative to less profitable firms. It implies firm's performance and debt are expected to be negatively associated.

Graham and Harvey (2011) discussed the main costs of equity as; tax costs, adverse selection, premium and floatation costs. These costs have an effect on the performance of firms when aggregated. This view was supported by Javed & Akhtar (2012) who found that use of equity capital is positively related to the performance of family owned businesses in Pakistan. Debt restructuring is a process used by institutions to avoid the risk of default on existing debt or to take advantage of lower available interest rates (Kim, Ko & Wang, 2019). Debt restructuring can be carried out by individuals on the brink of insolvency as well, and by countries that are heading for default on sovereign debt.

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Frank and Goyal (2017) observed that profitable firms tend to retire their debt and maintain leverage close to the lower end, whereas loss making firms are found to have higher debt level and are close to the higher limit of debt ratio. This indicates that profitability may also reflect the growth aspect of firms. This suggests that firm performance and leverage may be negatively related. Accordingly, profitable firms are likely to use retained earnings and make less use of debt relative to less profitable firms. It implies firm's performance and debt are expected to be negatively associated.

Eriotis, Vasiliou and Ventoura-Neokosimidi (2017) on how firm characteristics affect financial structure, they investigated the relationship between debt-to-equity ratio and the firm's profitability. In their study, the firm characteristics were analyzed as determinants of financial structure according to different explanatory theories, then the hypothesis tested was that debt ratio at time t depends on the size of the firm at time t , the growth of the firm at time t , its quick ratio at time t and its interest coverage ratio at time t . The findings of the study justified the hypothesis that there is a negative relation between the debt ratio of the firms and their growth, their quick ratio and their interest coverage ratio. They found that size appears to maintain a positive relation and according to their dummy variable there is a differentiation in the financial structure among firms with a debt ratio greater than fifty percent and those with a debt ratio lower than fifty percent. Taking into consideration the level of a firm's investment and the degree of market power, the study found that there is a strong negative impact of the debt-to-equity ratio on a firm's profitability. This means that highly profitable firms tend to use their internal finances for their investment activities as compared to not so profitable firms that highly rely on debt financing.

In another study conducted by Al-Kayed, Zain and Duasa (2014) where they examined the relationship between financial structure and performance of Islamic banks, they stated that these banks can either use high capital ratios which increase their soundness and safety while lowering the required return by investors, or depend on deposits and bonds which are considered cheaper sources of funds due to their tax rebate. The study thus established that the performance of Islamic banks measured by profitability responds positively to an increase in equity measured by capital ratio.

Chowdhury (2010) sought to examine the impact of financial structure on the wealth of a firm using comparative, correlation and regression analysis. They found that maximizing the wealth of a firm requires a perfect combination of debt and equity, whereas cost of capital has a negative correlation in this decision and the cost of capital should minimum possible. They also found that by changing the financial structure composition, a firm can increase its wealth in which the finance manager can utilize the debt in order to form optimal financial structure to maximize the wealth of shareholders

Pelham (2010) argued that long term debts provided small firms with more competitive advantages when compared with large firms. According to the results it was found out that there is a direct

positive and significant relationship between long term loans and financial performance of the small businesses. He reported that long term debt was positively related to the growth/share, /sales effectiveness, and gross profit in small and medium size manufacturing firms. Maina and Kondongo (2013) investigated the effect of debt equity ratio performance of firms listed at the Nairobi Securities exchange. A census of all firms listed at the Nairobi Security Exchange from year 2002-2011 was the sample. The study found a significant negative relationship between debt-equity ratio and all measures of performance. The study further found that that firms listed at NSE used more short-term debts than long term.

According to Anthony (2017), when control is to be exerted, the equity holders, as residual claimants, have the right to revise the employment terms of managers. They can successfully adapt by bringing about the desired changes through coordination with firm managers. Such form of coordination is more expensive than coordination through price-based systems. It is also likely to result in greater value to equity holders and thereby increasing firm performance. He further suggested that strategic assets should be financed through equity. A deviation from this relationship can lead to higher organizing costs, which could have far reaching implications in the long run resulting in poor firm performance.

2.2.2 Equity Restructuring and Financial Performance

According to Kisgen (2016), equity capital is the mode that enables equity holders to exert influence and monitor managerial decisions continuously through the board of directors. Hall et al. (2016) suggests that strategic assets should be financed through equity. A deviation from this relationship can lead to higher organizing costs, which could have far reaching implications in the long run resulting in poor performance.

Graham (2017) discussed the main costs of equity as; tax costs, adverse selection, premium and floatation costs. These costs have an effect on the performance of firms when aggregated. These findings by Graham are consistent with existing theoretical models and empirical studies. Myers and Majluf (2014) consider a firm with a single all-or-nothing investment opportunity shows that asymmetric information increases the cost of equity if the firm is pooled with those of lower quality resulting in decreased performance.

Contrarily, Kimando and Kihoro (2012) argues that the firm that uses equity finance is able to make its performance better since there is direct control and because all the equity holders are the

residual claimants they have to ensure that resources are allocated efficiently to be able to maximize shareholders wealth. Both's arguments have been supported by Boateng (2011) who found that use of equity capital is positively related to the performance of family owned businesses in Pakistan. Equity restructuring involves aligning the retained earnings and share capital for the Sacco. (Raposo & Lehmann, 2019). Equity restructuring is a transaction between a corporation and its shareholders that alters the fair value of the shares associated with an option or similar reward (Njagi, Maina & Kariuki, 2017).

Silva (2018) on the effect of equity structure on MFIs performance is consistent with the previous study by Kyereboah-Coleman (2017). This study found that total equity impacts positively and significantly on ROE while negatively and significantly on ROA. Long term equity had a positively and significantly impact ROE but not significantly impact on ROA of MFIs. This shows that if MFIs use long term debt to finance their operations, there may not be a pressure on management of MFI. This further suggests that profitable MFIs depend more on long term debt financing. The study uses a data set which consists of 290 MFIs from 61 countries. ROA and ROE is used as performance indicators, while debt to equity, long term debt to equity, short term debt to equity, debt to assets, long term debt to assets and short term debt to assets ratios are used as indicators of financial structure of MFIs.

Kar (2012) the effect of equity and financing structure relevance to the performance of microfinance institutions from an agency theoretic standpoint. The results of the study confirm the agency theoretic claim that an increase in leverage raises profit-efficiency. It also finds that cost efficiency decreases with decreasing leverage. Leverage have a negative significant impact on debt of outreach, but the study finds that equity structure does not have any noticeable impact on breadth of outreach. The study used a panel dataset of 782 MFIs in 92 countries for the period 2000–2010. ROA, ROE and operating expenses per dollar lent (OELP) are used as indicators for financial performance and some of the indicators for financial structure are capital-asset ratio, debt-equity ratio and loans-asset ratio.

Mbuh (2016), sought to find out the effects of equity structure on the financial sustainability of microfinance institutions. The study used panel data of three microfinance institutions in Cameroon for a period of fourteen years. Data was analyzed using multiple linear regressions with fixed and random effects. The study showed that financial structure has a significant effect on the

financial sustainability of microfinance institutions. Specifically, debt and equity financing are impact variables of financial sustainability. Grant funding or donations do not significantly bring information to the modeling of the financial sustainability of microfinance institutions

Ahmad, Abdullah and Roslan (2012) found that equity financing and total debt have significant relationship with Return on Asset and Return on Equity. Similarly in Ghana, Abor (2015) established that equity financing has a significant positive relationship with Return on Equity and long term debt has a significant negative relationship with return on Equity. Short term debt are less expensive as compared to long term debts leading to an increase in profit levels.

Obwori, Munene and Kaburi (2012) about the effect of funding on the growth of small scale enterprises demonstrated that the amount gotten from external funds does not effectively support the growth of firms. One of the limitations to firms was that small scale enterprises had limited access to borrowings because of lack of collaterals, bank accounts and the high interest rates for the loans. The recommendations from the study were that there should be provision of basic institutional structures for capacity building, the firms should build linkages with financial institutions in order to attract funding, and there is need for a financial strategy implementation plan for firms.

Trong (2012) on the link between funding structure and the performance of microfinance institutions, he found that the performance of these institutions vary depending on the consistency of the characteristics of the microfinance institutions. The study also found out that profitable and regulated microfinance institutions which take up more commercial funds tend to have higher sustainability, efficiency and outreach to new members; that a large scale of operations helps microfinance institutions achieve higher profitability; that there is no trade-off between the level of attraction of new members by the microfinance institutions and their efficiency; that larger loan amounts attract higher loan costs; and that the recent global financial crisis had a minor impact on the performance of microfinance institutions since they had a low level of self-sufficiency which is associated with a low degree of financial integration.

Abdul (2012) conducted a similar study to determine the relationship between financial structure decisions and the performance of firms in Pakistan. The study concluded that financial leverage has a significant negative relationship with firm performance as measured by ROA, GM, and

Tobin's Q. The relationship between financial leverage and firm performance as measured by the return on equity (ROE) was negative but not statistically significant.

Nikolaos (2016) in an attempt to investigate the relationship between debts-to equity ratio and firm's profitability, taking into consideration the level of firms' investment and the degree of market power found that there is negative and statistically significant relationship between debt-to-equity ratio and profit margin. The negative sign indicated that either the cost of borrowed capital is higher than its benefit from investment, or that firms financed by retained profits are more profitable than those financed by borrowed capital.

Kaumbuthu (2011) carried out a study to determine the relationship between financial structure and return on equity for industrial and allied sectors in the Nairobi Securities Exchange during the period 2004 to 2008. Financial structure was proxied by debt equity ratio while performance focused on return on equity. The study applied regression analysis and found a negative relationship between debt equity ratio and ROE. The study focused on only one sector of the companies listed in Nairobi Securities Exchange and paid attention to only one aspect of financing decisions. The results of the study, therefore, may not be generalized to the other sectors.

In a study to examine the impact of financial structure on the performance of firms, Adekunle & Sunday (2009) used debt ratio to proxy financial structure while return on asset and return on equity were used as measures of firms' performance. The study used the Ordinary Least Squares method of estimation. The result of the study indicated that debt ratio has a significant negative impact on the firm's financial measures of performance. The study, however, did not consider other financing decisions in the analysis, including the mediating effect of internal cash flow available. Kiogora (2012) sought to find out whether financial structures of quoted companies were consistent over time and to ascertain whether companies quoted on the Nairobi stock Exchange in the same industry had similar financial structures. He found out that there were differences in financial structure among industry groups: there was a negative relationship between returns of firms quoted on the Nairobi Stock Exchange and their level of leverage and that companies in the Agricultural sector had consistent levels of equity from year to year. Firms within a given sector tended to cluster towards some target Equity/Total Assets ratio implying that an optimal financial structure exists. He also found out that returns increased with increased leverage hence supporting the traditionalists' view of an optimal structure.

Akhtar *et al.* (2012) sought to investigate the relationship between financial leverage and the financial performance in their paper titled Relationship between Financial leverage and Financial Performance: Evidence from Fuel & Energy Sector of Pakistan. In their study they employed a sample of 20 listed public limited companies from Fuel and Energy sector listed at Karachi Stock Exchange (KSE). To test the hypothesis, the main variables used in the study consist of a dependent variable which is financial performance of fuel and energy sector while an independent variable financial leverage in fuel and energy sector. Their study showed that financial leverage has got a positive relationship with financial performance. Similar findings were established by Ojo (2012) who empirically examined the effect of financial leverage on corporate performance of some selected companies in Nigeria. The study revealed that leverage significantly affected corporate performance in Nigeria.

Weinraub and Visscher (2018) in their study on debt financing suggest that aggressive liquidity policy combine the higher levels of normally lower cost short-term debt and less long-term capital. Although capital costs are reduced, this increases the risk of a short-term liquidity. They established that total and short term debt is positively related to firm's profitability, which might be the most important factor in accessing outside financing in countries with weak collateral laws. From their studies they also found out that a negative relation between tangibility and short-term debt and a positive relationship between tangibility and long-term debt exists. These results are consistent with most theories on financial structure that suggest that firms without fixed assets to use for collateral are unable to access long-term financing. According to Teruel and Solano (2017), short-term debt is positively correlated with firm's growth opportunities. The anecdotal evidence suggests that there is a positive relationship between short term debt financing and financial performance.

Frank and Goyal (2017) observed that profitable firms tend to retire their debt and maintain leverage close to the lower end, whereas loss making firms are found to have higher debt level and are close to the higher limit of debt ratio. This indicates that profitability may also reflect the growth aspect of firms. This suggests that firm performance and leverage may be negatively related. Accordingly, profitable firms are likely to use retained earnings and make less use of debt relative to less profitable firms. It implies firm's performance and debt are expected to be negatively associated.

Magara (2012) did a study on financial structure and its determinants at the Nairobi Securities Exchange. The study sought to find out the major determinants of financial structure. It was established that from the period 2007 to 2011, there was a positive significant relationship between the firm size, tangibility and growth rate and the degree of leverage of the firm. However, the study did not take into consideration macro- economic factors like inflation and interest rates. Hadlock and James (2012) argued that provided that earning power of firms exceed leverage interest cost of debt, financial leverage will have a positive effect in firms return on equity. They further argued that the extent to which a firm's earnings' power is likely to remain above the breakeven point and the potential speed or flexibility with which it can adjust its debt usage, if its earnings' power falls below average interest costs, should help to determine the level of debt that the firm is willing to commit itself to at a given point in time.

According to Anthony (2017), since debt sales bring additional cash into the firm, this could exacerbate agency problems. Alternatively, if firms use the debt issue proceeds to address the gap between investments needs and internal sources of funding, this would not necessarily lead to an increase in excess cash within the firm. The periodic interest payments on debt would then commit managers to pay out excess free cash flow. Hence, debt issues could reduce agency costs, and have positive effects on firm value and performance.

Mumanyi (2014) sought to identify the challenges and opportunities facing SACCOS in Kenya and narrowing his study to Mombasa County. This study found out that one of these challenges was lack of finance, and that despite this; opportunities were available to SACCOS as they had a positive impact on economic development including capital accumulation. One of the recommendations of the study to policy makers and government was to formulate policies and strategies that will support the growth of SACCOS and this would be a significant alternative solution for financing micro and small businesses; the study thus brought up concerns over the SACCOS financing and indicated that such would influence the growth of SACCOS.

Sekabira (2013) found that equity and grants were negatively correlated to equity and financial sustainability of microfinance institutions. When sustainability was more constricted to financial sustainability, debt and share capital remained noteworthy. Other than grants, debt was paid back on competitive market interest rates, whereas share capital fetched in revenues to the MFIs at

market interest rates from the borrowers. Grants and debt had a substantial damaging consequence on MFI performance.

2.2.3 Deposits Restructuring and Financial Performance

Rahman and Mazlan (2014) investigated minimum deposit increment on performance of microfinance institutions and compared their positions in Bangladesh. The study used secondary quantitative data from the MIX market website where containing information from financial statements from the MFIs operating in Bangladesh. The multiple regression output revealed that minimum deposit increment had a positive effect on performance of microfinance institutions. However, study recommended for policy considerations of the successful and effective minimum deposits for microfinance programs through simplify of distribution of loan, improve yield on gross loan portfolio, personnel productivity and reduces of borrowing fund from the donors, reducing operating cost, utilize resources to generate financial revenue and focused on increase of value of their total assets.

Ombaka and Jagongo (2018) found that Sacco deposits had a strong positive correlation with performance of deposit taking Sacco's. Harwood, Nakola and Nyaana (2016), examined the importance of member deposits and savings in deposit taking Sacco's and indicated that voluntary savings is for the provision of loan services. By providing services to members and customers of different income groups, deposit taking Sacco's accumulates deposits which are stable, low cost source of financing for the growing loan portfolios. These finances are lent to members to invest in productive investments in agriculture, education, housing, and small businesses in the rural and urban areas (Waithaka & Kimencu, 2018).

Arnone and Pellegrini (2012) conducted a study on the empirical analysis of the monthly deposits and their impact on microfinance institutions. The analysis showed that high member deposits are negatively related to increased capital base. Successively, the study tried to figure out the effect of these factors in different geographical regions. Finally, the study highlighted the importance of various legal and organizational frameworks and macro-governance features on minimum member deposits.

Bassem (2018) by applying the non-parametric Data Envelopment Analysis (DEA) method with all the limitations where error could cause significant problems, investigated the impact of constant member deposits of 38 microfinance institutions in the Mediterranean region. Results found that

eight institutions maintained their loaning funds according to the member deposits. The survey concluded by proposing that the size of the MFIs member deposits has a positive effect on their loaning funds for MFIs. Deposit restructuring involves aligning the minimum member contributions while aiming to increase the working capital for the Sacco's.

Abrar and Javaid (2016) study emphasized that higher member deposits informs the MFI lending strengths of the borrowers and that the lending function is properly administered based on the available member deposits, resulting in enhanced profitability. Meanwhile, a higher minimum deposits may imply increase in member withdrawal risk. Kimamo (2013) examined the relationship between deposits and financial performance of Microfinance Institutions in Kenya. Using a purposive sampling technique employed on a population of 39 MFIs registered with AMFI and with the help of secondary data spanning five years from 2008 to 2012 the study found a strong negative correlation between member deposits and financial performance.

Omeje (2017) study stated that member deposits acts as a measure of lending strengths; since deposits are regarded as being more liquid (as when compared to the assets), in a microfinancing firm's capital-structure. Thus, MFIs with a comparatively bigger member deposits experience a higher lending advantage As Ledgerwood (2018) describes voluntary and compulsory savings, stating that voluntary savings are much easier to be adopted as when compared to the compulsory savings, since these are provided by the MFIs to not only the borrowers but also the nonborrowers and are not considered to be an obligation towards the accessing credit services of MFIs.

Mwangi (2010) did a study on the effect of financial structure on the financial performance of firms listed at the Nairobi Stock Exchange. Data was collected using structured questionnaires. The study identified a strong positive relationship between short term debt financing and the firms' return on equity, liquidity, and return on investment. This hypothesis was contrasted by a number of studies, to them the benefit of short term debt financing is less than its negative aspects, and hence argue that firms will always prefer to fund investments by internal sources first before considering external sources of funds.

Osuji and Odita (2010) conducted a study on impact of financial structure on financial performance of Nigerian firms using a sample of thirty non-financial firms listed on the Nigerian Stock Exchange during the seven year period, 2004 – 2010. Panel data for the selected firms were generated and analysed using ordinary least squares (OLS) as a method of estimation. The result

showed that a firm's financial structure surrogated by debt ratio had a significantly negative impact on the firm's financial measures, return on asset. Similarly, Mustafa and Osama (2016) investigated the effect of financial structure on the performance of the public Jordanian firms listed in Amman stock market. The study used multiple regression model represented by ordinary least squares (OLS) as a technique to examine what is the effect of financial structure on the performance by applying on 76 firms (53 industrial firms and 23 service corporation) for the period (2010-2016). The results of the study concluded that financial structure associated negatively and statistically with firm performance on the study sample generally. In addition, the study found out that there was no significant difference to the impact of the financial leverage between high financial leverage firms and low financial leverage firms on their performance.

Anthony (2017) found that since debt sales bring additional cash into the firm, this could exacerbate agency problems. Alternatively, if firms use the debt issue proceeds to address the gap between investments needs and internal sources of funding, this would not necessarily lead to an increase in excess cash within the firm. The periodic interest payments on debt would then commit managers to pay out excess free cash flow. Hence, debt issues could reduce agency costs, and have positive effects on firm value and performance. Hadlock and James (2012) argued that provided that earning power of firms exceed leverage interest cost of debt, financial leverage will have a positive effect in firms return on equity. They further argued that the extent to which a firm's earnings' power is likely to remain above the breakeven point and the potential speed or flexibility with which it can adjust its debt usage, if its earnings' power falls below average interest costs, should help to determine the level of debt that the firm is willing to commit itself to at a given point in time.

Ruozzi and Ferrari (2013) noted the essence of imposing liquidity requirements towards the implementation of government policies. They found that liquidity requirements can be varied to regulate the quantity of money circulating in the economy and eventually impact financial performance of the organization. Covas and Driscoll (2014) avers that by regulating the quantity of money in the economy the level of demand is by extension regulated. However, it was noted that by regulating the liquidity requirements, the financial intermediaries are affected in terms of deposits that can be converted into loans. For instance, a high rate of liquidity requirements implies that the financial institutions have to retain a higher level of deposits thus reducing the amount of deposits that can be converted into loans. Varying the levels of liquidity requirements affects the

performance of financial intermediaries substantially. Financial intermediaries get their incomes from interests of loaned out funds, regulations that affect loanable funds affects the income of the financial intermediaries.

Onguka (2014) carried out a study on the effect of regulations on the financial performance of deposit taking savings and credit cooperative societies in Kenya. The aim of this study was to investigate the effect of regulations on the financial performance of deposit taking savings and credit cooperatives (SACCOs) in Kenya. The results indicated that SACCO regulations have positive effect on capital ratio and which led to an increase in return on assets (ROA), further it was established that increase in liquidity led to a decrease in ROA .The study found out that a unit increase in management efficiency increased ROA. From the findings, the study concluded that capital regulations, capital ratio, liquidity and management efficiency significantly influence financial performance of the Deposit Taking SACCOs. Most SACCOs reported improvement in their performance both in membership, management efficiency, portfolio growth and loan cycle. Even though this was attributed to a number of factors ranging from increased membership, high efficiency, high demand and quick recoveries, one can easily attribute these results on positive influence of SASRA regulation.

Hudon and Traca (2011) used an original database of rating agencies; this study gave empirical evidence on the impact of member contribution subsidy on the lending capacity of microfinance institutions. Findings resolved that member contribution subsidies have had a negative impact on loan lending, in the sense that MFIs that have member contribution subsidies lower their lending capacity unless they seek external funding than those that do not. However, it also found that subsidization beyond a certain threshold renders a marginal effect.

2.3 Summary of Research Gap

The studies on the impact of financial restructuring in Kenyan Sacco's performance have been insufficient and scarce; such studies have in most cases been done on developed economies. The studies diverse various findings; Kibet (2015) found that there exist a positive relationship between equity financing and profitability of MFIs in Kenya. Silva (2018) on the effect of financial structure on MFIs performance found that total debt and short term debt ratio impacts positively and significantly on ROE while negatively and significantly on ROA. Kyereboah- Coleman (2017) found that the ratio of total-debt to short-term-debt significantly negatively impacts the ROA,

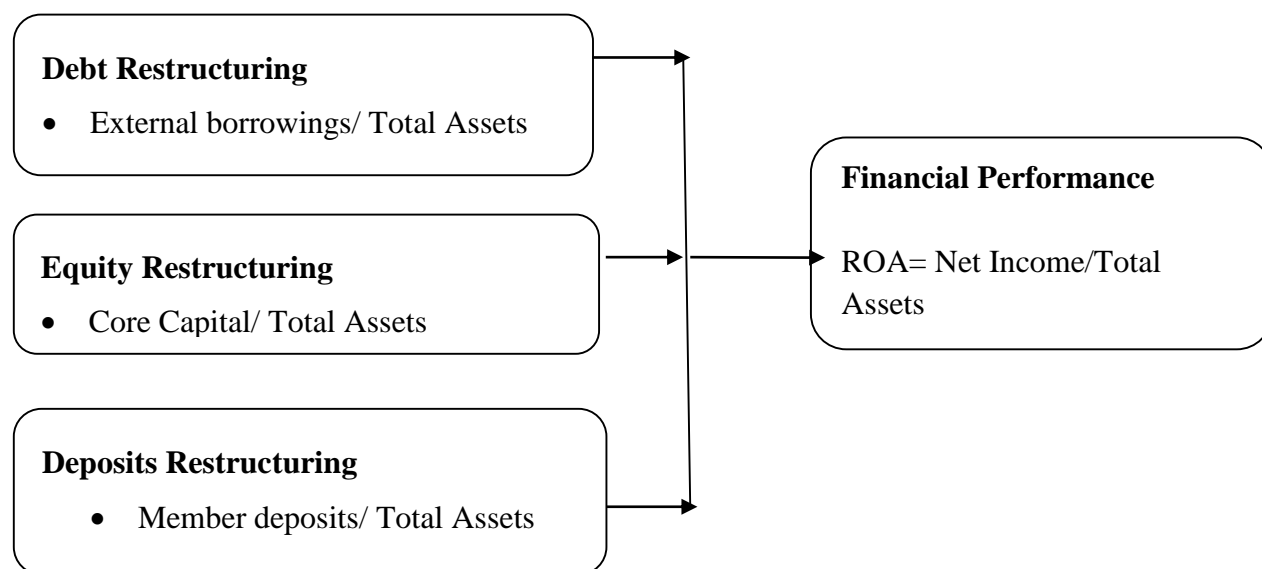
while significantly positively affecting the ROE; strongly suggesting that profitable MFIs rely more on the long-term debt financing. This view was supported by Javed & Akhtar (2012) who found that use of equity capital is positively related to the performance of family owned businesses in Pakistan. Obokoh and Ojiako (2016) found that there is negative and statistically significant relationship between debt-to-equity ratio and profit margin. According to Teruel and Solano (2017), short-term debt is positively correlated with firm's growth opportunities.

Ondieki and Onsase (2017) assessed the effect of external borrowing on financial performance of SACCOs. Ondieki *et al.* (2018) however, did not consider the effect of internal finances such as member contributions and member deposits. Mwenda and Kalio (2017) investigated the determinants of capital structure and the effect of capital structure on the profitability of SACCOs. Nonetheless the studies fail to address the aspects of financial restructuring in debt, equity and deposits restructuring in the financial performance of the Sacco's.

Silva (2018) found that total debt and short term debt ratio impacts positively and significantly on ROE while negatively and significantly on ROA. Long term debt ratio had a positively and significantly impact ROE but not significantly impact on ROA of MFIs. Kar (2012) established that leverage have a negative significant impact on debt of outreach, but the study finds that financial structure does not have any noticeable impact on breadth of outreach. Ahmad, Abdullah and Roslan (2012) found that equity financing and total debt have significant relationship with Return on Asset and Return on Equity. Kimamo (2013) study found a strong negative correlation between financial outreach and financial performance. These findings are inconsistent and thus understanding the impact of Sacco's financial restructuring and its composition on financial performance, whose knowledge largely misses in the literature, constitutes a knowledge gap in Kenya hence studying the arena is of significance.

2.4 Conceptual Framework

A conceptual framework is the researcher's synthesis of literature on how a phenomenon is explained. It is a map in written or graphical form that shows the logical relationship of ideas in a research (Creswell, 2014). Figure 2.1 presents the conceptual framework of the study. As shown, the study has three independent variables and one dependent variable. The independent variables are debt restructuring, equity restructuring, and deposits restructuring while the dependent variable is financial performance.



Independent Variables

Dependent Variable

Figure 2.1: Conceptual Framework

Debt restructuring process is used by institutions to avoid the risk of default on existing debt or to take advantage of lower available interest rates (Kim, Ko & Wang, 2019). This was measured using external borrowings to total assets. Equity restructuring entails transaction between a corporation and its shareholders that alters the fair value of the shares associated with an option or similar reward (Raposo & Lehmann, 2019). This was measured using core capital to total assets. Deposits restructuring involves aligning the minimum member contributions while aiming to increase the working capital for the Sacco's (Nasrin, Rasiah & Masud, 2018). This was measured using member deposits to total assets. Financial performance is the ability of the financial institution management to generate income by utilizing company assets at their disposal (Haber & Reichel, 2015). This was measured using ROA (Net Income/Total Assets).

2.5 Operationalization of Variables

The independent and dependent variables are operationalized as shown in Table 2.1.

Table 2.1: Operationalization of Variables

Variables	Definition	Measurement	Measurement Scale
Dependent Variable	Financial Performance	<ul style="list-style-type: none"> • ROA= Net Income to Total Assets 	Ratio
Independent Variable	Debt restructuring	<ul style="list-style-type: none"> • External borrowings to Total Assets 	Ratio
Independent Variable	Equity restructuring	<ul style="list-style-type: none"> • Core Capital to Total Assets 	Ratio
Independent Variable	Deposit Restructuring	<ul style="list-style-type: none"> • Member deposits to Total Assets 	Ratio

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This section examines the research design, target study group, data gathering instrument, data gathering procedure, data analysis and processing, and measurement of study variables. It further analyses the various processes and approaches to be used when gathering and processing data.

3.1 Research design

The study adopted descriptive research design approach. Mutandwa, Gala and Grebner (2016), assert that descriptive research design is applicable majorly when the objectives of the study are systematic. The design further aims at exploring the nature of the factors that are involved in a given situation and to ascertain the degree of the association between the variables under study. This research design is preferred for this study because the research seeks to study the existing phenomenon of the variables with no intention of manipulating any variable.

3.3 Target Population

Target population refers to the aggregation of elements from which the sample is selected (Rubin & Babbie, 2015). Target population represents the collection of cases the researcher is interested and which they intend to generalize. The study targeted all the 39 deposits taking Sacco's (DTSs) (See Appendix II) in Nairobi City County licensed by SASRA as at end of 2019. Deposit taking Sacco's are authorized to take deposits from and lend to its members. The researcher focused on Sacco's in an effort to analyze their financial structures with their financial performance. The period covered a 10 years from 2010-2019.

3.4 Sampling Procedure and Sample Size

Sampling is a process which enables a researcher to gather a few things or people together that represent the characters of the whole population under study (Blumberg, Cooper & Schindler, 2014). According to McMillan and Schumacher (2014), census is a study where all members, objects or things in the population take part in the research. Census technique is suitable when the levels of accuracy and reliability required in the study are very high. Additionally, census is preferred when the members of the population are few. This research used census technique to study the 39 SACCOs in Nairobi County. The justification here is on the basis that there are only

a few firms. The years covered was from 2010-2019. The 10-year period provides a substantive duration for panel data analysis.

3.5 Data Collection

The research adopted the use of secondary data. The secondary data was obtained from SASRA registry comprising of audited financial statements submitted by the deposit-taking SACCOs. As Cooper and Schindler (2013) explained, secondary data is a useful qualitative technique for evaluating historical or contemporary confidential public records, reports, government documents and opinions. The study focused on the period 2010 to 2019. This is the period when most of the DTSs were licensed by SASRA and had submitted their returns and financial statements to the regulator.

The secondary data was collected using a data collection sheet (Appendix 1). The researcher wrote to the regulator (SASRA) through email requesting for permission to collect data. The researcher also visited the regulator's registry and collect the relevant data and information as envisaged by the study. Upon receipt of all the necessary data, the researcher performed data analysis as guided by the research objectives.

3.6 Diagnostic Tests

Collected data must first be assessed before the actual estimation of the model (Mutandwa, Gala & Grebner, 2016). The tests must be conducted to find out whether the data has met the assumptions of regression models since any data contravening the presumptions of the panel regression yield spurious outcomes. This study used autocorrelation tests, heteroscedasticity tests, multicollinearity tests, normality assumptions and Hausman test to evaluate the data collected before the actual analysis.

3.6.1 Autocorrelation Test

Autocorrelation occurs when data seem to pick up on a certain trend over time. The data, in this case, produce some similarities in the rates of change over successive periods of time. Models with autocorrelation suggest that they are well defined which suggests that the key variable(s) are missing from the model. Autocorrelation has no influence on unbiasedness and linearity of the estimators. The only known consequence is that it contravenes the attributes of the Ordinary Least

Square (OLS), which culminates to wrong outcomes in hypothesis testing (Gujarati, 2004). The study used Breusch Godfrey test to ascertain whether the data collected has a serial autocorrelation.

3.6.2 Heteroscedasticity Assessment

In regression models, the error term difference or variance is assumed to be constant across observations. If this assumption is violated, the random variable is called heteroscedastic. If the control model is heteroscedasticity, then the analysis is not correct. According to Williams (2016), heteroscedasticity gives equal weight to all observations and causes the standard errors to be discriminated and consequently results in an incorrect conclusion when testing the hypothesis. This study used Breusch-Pagan test to check for existence of heteroscedasticity in the data collected.

3.6.3 Normality Assumptions

Normality assumption is the possibility that the gathered data was normally distributed over the sampled population. Brooks (2008) adds that normality tests are executed to evaluate whether the data set is well represented by a normal distribution. Linear and panel regression models presume that the error term is normally distributed at a mean of zero and constant variance. Once the data is confirmed to meet the normality assumption test, ordinary least square estimation can easily be developed and would be much more accurate. Normality assumptions was tested using Jacque Bera Test where we reject the null hypothesis that the data is normally distributed if p-value is below 0.05.

3.6.4 Multicollinearity Test

Multicollinearity is defined by Iacobucci *et al* (2017) as a test that determines whether two or more variants are directly related in a regression analysis. The intensity of the association between variables is assumed to be between 1 and -1. Where 1 denotes perfect positive association, -1 expresses a perfect negative association while a coefficient nearing zero suggests a weak interrelationship between the variables. Multicollinearity problems arise when the correlation between the explanatory variables is greater than 0.75 (Malhotra, 2007). However, Gujarati (2004) argues that what matters most is the degree of the multicollinearity and not its presence or absence. Consequently, this study adopted Field's (2009) recommendation that variables greater than 10 should be avoided and hence the research would flag any combinations that are higher than 10 for

elimination. Additionally, to test for multicollinearity, Variance inflation factors (VIF) test was used (Nachtsheim, 2004).

3.6.5 Durbin – Wu –Hausman Test

Also known as the Hausman specification test, the test is carried out to check for consistency of the estimator when compared to an alternative and less efficient estimator. Green (2008) opines that for one to decide between random effects and fixed effects, it is important to run a Hausman specification test whereby the null hypothesis is the random effects. Consequently, the study conducted a Hausman specification test on the data to determine the most appropriate estimation model between the random effects and the fixed effects models.

Table 3.1: Summary of Tests

No	Diagnostic Test	Mode of Test	Rule
1	Autocorrelation Tests	Breusch Godfrey Test	Reject if p-value is <0.05
2	Heteroscedasticity Tests	Breusch-Pagan Test	Reject if p-value is <0.05
3	Multicollinearity Tests	Variance Inflation Factors (VIF)	Reject if VIF > 10
4	Normality Assumptions	Jacque Bera Test	Reject if p-value is <0.05
5	Hausman Test	Hausman Specification Test	Use random effect if p-value is >0.05

3.7 Data Processing and Analysis

Etikan, Musa and Alkassim (2016) define data analysis as a process that reviews, converts and displays data to bring forth important information, and suggest conclusions to the researcher for purposes of decision making. Brooks (2008) asserts that panel data regression is preferred in conditions where the data at hand comprises both time series and cross-sectional components. This is because panel data can address a wider range of issues and more sophisticated problems than the classic cross-sectional data or the perfect time-series. Gujarat (2004) considers panel data to be desirable because it incorporates more information in the model, that is, it combines variability across time and cross-section units.

Subsequently, this research model is focused on panel data approach where the cross-sectional component is reflected by the Sacco's while the time-series component is reflected by the period of study (2010-2018). The research utilized a panel regression model using STATA software. The study adopted the use of panel regression analytical model as shown;

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \epsilon$$

Where;

Y_{it} = Financial Performance of SACCOs i at time t

X_1 – Debt Restructuring of Sacco i at time t

X_2 – Equity Restructuring of Sacco i at time t

X_3 – Deposit Restructuring of Sacco i at time t

t = time period 2010- 2019

β_0 - Is a constant; the concept explaining the SACCOs performance given and it's the Y value when all the predictor values ($X_1 \dots X_3$) are zero.

$\beta_1 \dots \beta_3$, – Are constants regression coefficients representing the condition of the independent variables to the dependent variables.

ϵ_{it} = Error term where i is cross sectional and t is time identifier (to cater for residual or nuisance variables)

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

This section presented the findings from the results and their analysis as to their relevance to the objectives and hypotheses. The findings are presented in tables and narrations as per the specific objectives. In addition we have presented the descriptive statistics, and the diagnostic tests. The chapter further presented the results of the models that was adopted in order to achieve the study's objective.

The data was obtained from the financial statements of the deposits taking Sacco's in Nairobi County. The data was also checked for completeness and any outliers from excel before importing to STATA where it was set to panel balanced data. As per the operationalization of our study variables, debt restructuring was obtained from external borrowings to total assets. Equity restructuring was obtained from the core capital to total assets. Lastly deposit restructuring was obtained from member deposits to total assets.

4.2 Descriptive Statistics

The descriptive statistics shows the mean, standard deviation, minimum and maximum values of the variables financial performance (Return on Assets), External borrowings to Total Assets, core Capital to Total Assets and Member deposits to Total Assets for the 39 deposits taking Sacco's (DTSs) for period 2010-2019. The results are depicted in percentages and are presented in Table 4.1.

Table 4.1: Descriptive Statistics

	Minimum	Maximum	Mean	Std. Dev
Return on Asset (ROA)	-0.035	0.040	0.020	0.012
Debt restructuring (External borrowings/ Total Assets)	0.010	0.242	0.140	0.024
Equity restructuring (Core Capital/ Total Assets)	0.128	0.294	0.241	0.023
Deposit Restructuring (Member deposits/ Total Assets)	0.810	0.978	0.852	0.253

The Return on Asset (ROA) had a mean of 0.020 and a standard deviation of 0.012. The minimum ratio was -0.035 and the maximum of 0.040. This implied that there were Sacco's that were operating at a negative ROA and were not able to raise revenue from their assets. Ideally, a ROA of 0.05(5%) is ideal for a company to be considered operating optimally. Thus in average, most of the Sacco's were below the 5% ROA. The Debt restructuring (External borrowings to Total Assets) had a mean of 0.140 and a standard deviation of 0.024. The minimum ratio was 0.010 and the maximum of 0.242. This implied that on average the Sacco's had maintained a low external to assets ratio of below 25% as required by the regulator (SASRA).

The Equity restructuring (Core Capital to Total Assets) had a mean of 0.241 and a standard deviation of 0.023. The minimum ratio was 0.128 and the maximum of 0.294. This implied that the core capital by the Sacco's was average in comparison to the total loans/assets issued by the Sacco's. This is as required by the regulator that the core capital of not less 10% to total assets should be maintained. The deposit restructuring (Member deposits to Total Assets) had a mean of 0.852 and a standard deviation of 0.253. The minimum ratio was 0.810 and the maximum of 0.978. This mean of 0.852 implied that member deposits raised by the Sacco members for loan issuance was above the total loans to assets by above 80% as required by SASRA the Sacco's regulator in Kenya. Adepoju, Salau and Obayelu (2017) established that the effects of debt reorganization had a weak correlation with financial performance of the Sacco's. Obokoh, Monday and Ojiak (2016) established that equity restructuring in the by dimensions of core capital had a weak effect on profitability over the long run. Omeje (2017) in Nigeria also found that raising the minimum deposit for the Sacco had a positive effect on performance since it increased the working capital for the Sacco's.

4.3 Trend Analysis

This section presents the analysis of the trends of the variables. The study conducted a trend analysis to establish the movement of the variables overtime in the deposits taking Sacco's in Nairobi County for the period 2010-2019.

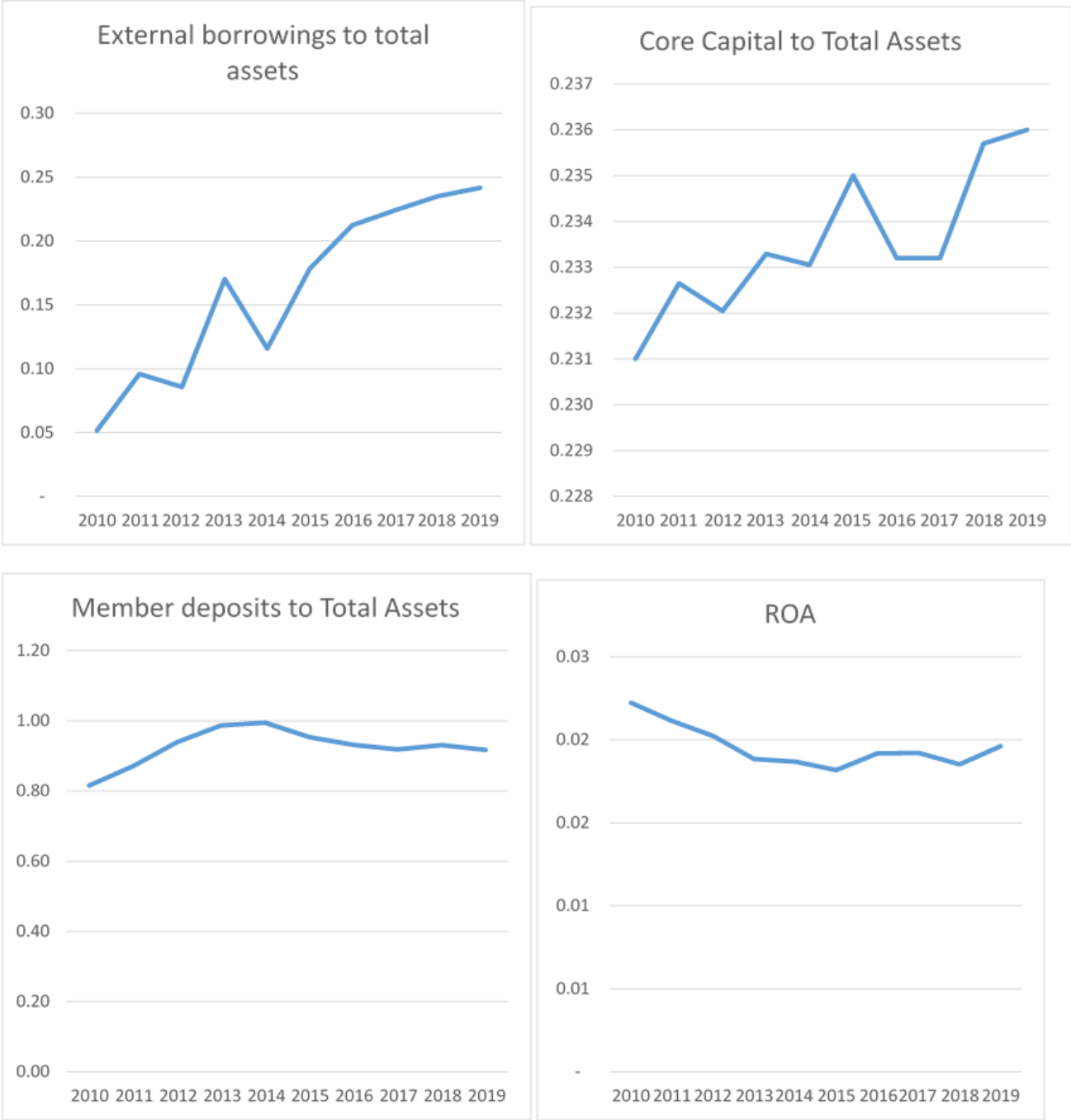


Figure 4.1: Trend Analysis

The trend line in Figure 4.1 shows that external borrowings to total assets for deposits taking Sacco's in Nairobi County recorded a general increasing trend with a drop in the year 2012 and 2015. However there was a steady rise therefrom until 2019 but did not surpass 25 % as required by the Sacco's regulator. The trend for core capital to total assets depicted an up and down trend. The lows were in 2012, 2014 and 2016 while the ups were in 2011, 2017 and 2019. The core capital to total assets increased. The trend however was above 10% as required by the regulator.

The trend for Member deposits to Total Assets depicted a steep rise from 2010 to 2014. However there was a slight drop on Member deposits to Total Assets until 2017 where it rose steadily until the year 2019. The member's deposits are the major source of funds for loans issuance and thus are to be maintained above 80% compared to total assets. The trend for Return on assets recorded a general drop from the year 2010 to 2015 where a slight increase was recorded in 2015 – 2016. The trend dropped slightly in 2017 and then rose in from slightly in 2018 to 2019.

4.4 Correlation Analysis

The study conducted correlation analysis for the various variables that are Debt restructuring, Equity restructuring and deposit restructuring on return on asset for the deposits taking Sacco's (DTSs) in order to examine the nature of the statistical relationships between each pair of variables. Table 4.2 shows the correlation matrix of all the variables included in the study.

Table 4.2: Correlation Matrix

	ROA	Debt restructuring	Equity restructuring	Deposit Restructuring
ROA	1.000			
Debt restructuring	0.383	1.000		
Equity restructuring	0.000	0.420	1.000	
Deposit Restructuring	0.624	0.000	0.675	1.000
	0.000	0.000	0.000	

The results in Table 4.2 show that debt restructuring ($r= 0.383$, $p=0.000$) had a positive and significance relationship on return on assets for the deposits taking Sacco's in Nairobi County. Equity restructuring ($r=0.624$, $p=0.000$) had a positive and significance relationship on return on assets for the deposits taking Sacco's in Nairobi County. Lastly, deposit restructuring ($r= 0.632$, $p= 0.000$) had a positive and significance relationship on return on assets for the deposits taking Sacco's in Nairobi County. This positive coefficient implied that an increase in Debt restructuring, Equity restructuring and deposit restructuring leads to an increase on return on assets for the deposits taking Sacco's in Nairobi County.

4.5 Diagnostics

The study conducted out different diagnostic tests to make sure that the postulations of Classical Linear Regression Model (CLRM) are not contravened. The pre-estimation tests conducted in this case were the Normality test, Multicollinearity, Test for Fixed or Random Effects, Wooldridge Test for Serial Correlation and Heteroscedasticity Test. The study performed these tests to avoid spurious regression results.

4.5.1 Test for Multicollinearity

Multicollinearity was assessed in this study using the variance inflation factors (VIF). According to Field (2009) VIF values in excess of 10 is an indication of the presence of Multicollinearity. The results are illustrated in Figure 4.3.

Table 4.3: Multicollinearity

Variable	VIF	1/VIF
Debt restructuring	2.95	0.339
Equity restructuring	2.88	0.347
Deposit Restructuring	2.24	0.446

As shown in Table 4.2, Debt restructuring had a 1/VIF value of 2.95, Equity restructuring had a 1/VIF value of 2.88, Deposit Restructuring a 1/VIF value of 2.24. Therefore, the results revealed that there was no multicollinearity since all the values for 1/VIF were less than 10.

4.5.2 Test for Autocorrelation

Autocorrelation Test was conducted to determine if the data contravenes the attributes of the Ordinary Least Square (OLS), which culminates to wrong outcomes in hypothesis testing. The study used Wooldridge Test for Serial Correlation to ascertain whether the data collected has a serial autocorrelation.

Table 4.4: Serial Correlation Tests

Wooldridge test for autocorrelation in panel data

H₀: no first-order autocorrelation

F(1, 38) = 0.798

Prob > F = 0.3772

The results for the Wooldridge test for autocorrelation indicated that the F-test value was 0.798 and the P-value was 0.3772 indicating that the F-test is not statistically significant at 5% level. Hence, the null hypothesis of no autocorrelation was supported and the study concluded that residuals are not auto correlated.

4.5.3 Normality Test

To test for normality, the study applied the Jarque Bera test method. The Jarque–Bera test is a goodness-of-fit test of whether sample data have the skewness and kurtosis matching a normal distribution. Normality was checked on the residuals of a model, because those assumptions apply to the unexplained variance of a model. The hypothesis was that the data was normally distributed. The results are as shown in Table 4.5.

Table 4.5: Normality Test

. jb residuals

Jarque-Bera	normality test: 10.02 Chi(3)	0.077
Jarque-Bera	test for Ho: normality:	

The results in Table 4.5 indicated that the Chi-square value was 10.02 and the P-value was 0.077 which was larger than the 0.05. We thus concluded that the data was normal since the p-value was larger than the critical 0.05.

4.5.4 Heteroscedasticity Test

In regression models, the error term difference or variance is assumed to be constant across observations. If this assumption is violated, the random variable is called heteroscedastic. If the control model is heteroscedasticity, then the analysis is not correct. This study used Breusch-Pagan test to check for existence of heteroscedasticity in the data collected with the hypothesis that the data was homoscedastic.

Table 4.6: Heteroscedasticity Test Results

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity	
Ho: Constant variance	
Variables: fitted values of ROA	
chi2(39)	= 678.89
Prob > chi2	= 0.072

The hypothesis was therefore not rejected at a critical p value of 0.05 since the reported value for the chi2 (39) was 678.89 with a p-value of 0.072 which was larger than the critical 0.05. Thus, the data did not suffer from statistically significant heteroscedasticity.

4.5.5 Hausman Specifications Test

The Hausman specification test, was carried out to check for consistency of the estimator when compared to an alternative and less efficient estimator. Green (2008) opines that for one to decide between random effects and fixed effects, it was important to run a Hausman specification test whereby the null hypothesis is the random effects. Durbin – Wu –Hausman Test, was conducted to test on the data to determine the most appropriate estimation model between the random effects and the fixed effects models. The hypothesis was that random effect is preferred to fixed effect and the results are as shown in Table 4.7.

Table 4.7: Hausman Test

	(b)	(B)	(b-B)
	random	fixed	Difference
Debt restructuring	0.004928	0.003712	0.001216
Equity restructuring	0.016225	0.016249	-2.3E-05
Deposit Restructuring	0.017112	0.017553	-0.00044
chi2(3)	3.45		
Prob>chi2	0.081		

The Hausman test revealed a chi-square of 3.45 with a p-value of 0.081 indicating that at 5 percent level, the chi-square value obtained is statistically insignificant. Thus, the researcher did not reject the hypothesis that random effects model is preferred to fixed effect model and random model was thus adopted.

4.6 Regression Analysis

The study sought to carry out regression analysis to establish the statistical significance relationship between financial restructuring on financial performance of deposit taking Sacco's in Nairobi County. The variables were debt restructuring, equity restructuring and deposit restructuring on return on asset for the deposit taking Sacco's. The regression includes techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent and one or more independent variables. The results are presented in Table 4.8.

Table 4.8: Regression Analysis

ROA	Coef.	Std. Err.	z	P> z
Debt restructuring	0.0049	0.0019	2.5300	0.0110
Equity restructuring	0.0162	0.0025	6.4600	0.0000
Deposit Restructuring	0.0171	0.0023	7.3400	0.0000
_cons	0.0230	0.0012	-0.0300	0.9780
Wald chi2(3)	355.45			
Prob>chi2	0.000			
R squared Overall	0.5556			

$$Y_{it} = 0.023 + 0.0049X_{1it} + 0.0162X_{2it} + 0.0171X_{3it}$$

Where;

Y_{it} = Financial Performance of SACCOs i at time t

X_1 – Debt Restructuring of Sacco i at time t

X_2 – Equity Restructuring of Sacco i at time t

X_3 – Deposit Restructuring of Sacco i at time t

t = time period 2010- 2019

The overall R squared of 0.5556 implied that the three variables namely Debt restructuring, Equity restructuring and deposit restructuring explained 55.56% on the variations on performance for the deposit taking Sacco's. The overall model was significant as indicated by the Prob>chi2 of 0.000 with a Wald chi2 (4) of 355.45. In addition, the constant of 0.0230 showed that when Debt restructuring, Equity restructuring and deposit restructuring are held constant, performance will remain at 0.0230 units.

The results further portrayed a positive and significant relationship between Debt restructuring and return on assets for the deposit taking Sacco's in Nairobi County ($\beta = 0.0049$, $p = 0.0110$). There was a positive and significant relationship between Equity restructuring and return on assets for the deposit taking Sacco's in Nairobi County ($\beta = 0.0162$, $p = 0.0000$). Deposit Restructuring had

a positive and significant relationship with return on assets for the deposit taking Sacco's in Nairobi County ($\beta= 0.0171$, $p=0. 0.0000$). This implied that an increase in debt restructuring, Equity restructuring and deposit restructuring leads to a significant increase on return on assets for the deposits taking Sacco's in Nairobi County.

4.7 Discussion of Findings

The objective of this study was to investigate the effects of financial restructuring on the financial performance of deposit taking Sacco's in Kenya. The variables of interest were Debt restructuring, Equity restructuring and deposit restructuring on return of assets for deposit taking Sacco's. The pre-estimation tests conducted on Normality test, Multicollinearity, Test for Fixed or Random Effects, Test for Serial Correlation and Heteroscedasticity indicated that the underlying assumptions were fit for regression analysis.

The first objective of the study was to determine the effect of debt restructuring on the financial performance of deposit taking Sacco's in Kenya. Correlation results indicated that debt restructuring ($r= 0.383$, $p=0.000$) had a positive and significance relationship on return on assets for the deposits taking Sacco's in Nairobi County. Regression results indicated a positive and significant relationship between Debt restructuring and return on assets for the deposit taking Sacco's in Nairobi County ($\beta= 0.0049$, $p=0.0110$). This implies that a unitary increase in debt restructuring led to an increase in the financial performance of deposits taking Sacco's in Nairobi County by 0.0049 units holding other factors constant.

The null hypothesis was therefore rejected and the alternative hypothesis was adopted that Debt restructuring has a significant effect on the financial performance of deposit taking Sacco's in Kenya. The findings are consistent with Kibet (2015) found that most of MFIs in Kenya were using equity and or donations as their main source finances in Kenya which accounted for by 72.42% and 27.58% in form of debt. The study further found that there exist a positive relationship between equity financing and profitability of MFIs in Kenya. The findings are in line with Silva (2018) who established that total debt and short term debt ratio impacts positively and significantly on ROE while negatively and significantly on ROA. Long term debt ratio had a positively and significantly impact ROE but not significantly impact on ROA of MFIs. The findings are in agreement with Kyereboah- Coleman (2017) who found that most of the micro-financing firms incorporate more of debt-financing in their structures (long term debt in particular). The findings

also propose that debt-financing enables the micro-financing firms to better reach a larger number of customers and experience greater economies of scales, allowing MFIs to better cope with moral hazards and tough situations. This is also in line with Kehinde (2012) who revealed that most SMEs have an all equity finance structure and has a less debt finance compared to equity finance.

The second objective of the study was to determine the effect of equity restructuring on the financial performance of deposit taking Sacco's in Kenya. Correlation results indicated that equity restructuring ($r= 0.624$, $p=0.000$) had a positive and significance relationship on return on assets for the deposits taking Sacco's in Nairobi County. Regression results indicated a positive and significant relationship between equity restructuring and return on assets for the deposit taking Sacco's in Nairobi County ($\beta=0.0162$, $p=0. 0.0000$). This implies that a unitary increase in equity restructuring led to an increase in the financial performance of deposits taking Sacco's in Nairobi County by 0.0162 units holding other factors constant.

The null hypothesis was therefore rejected and the alternative hypothesis was adopted that equity restructuring has a significant effect on the financial performance of deposit taking Sacco's in Kenya. The findings are in line with Boateng (2011) who found that use of equity capital is positively related to the performance of family owned businesses. The findings are in tandem with Silva (2018) who found that total equity impacts positively and significantly on ROA. Long term equity had a positively and significantly impact ROE but not significantly impact on ROA of MFIs. The findings agree with Kar (2012) results of the study confirm the agency theoretic claim that an increase in leverage raises profit-efficiency. Ahmad, Abdullah and Roslan (2012) found that equity financing and total debt have significant relationship with Return on Asset and Return on Equity. The findings are consistent with Ghana, Abor (2015) who established that equity financing has a significant positive relationship with Return on Equity and long term debt has a significant negative relationship with return on Equity.

The third objective of the study was to determine the effect of deposit restructuring on the financial performance of deposit taking Sacco's in Kenya. Correlation results indicated that deposit restructuring ($r= 0.632$, $p=0.000$) had a positive and significance relationship on return on assets for the deposits taking Sacco's in Nairobi County. Regression results indicated a positive and significant relationship between deposit restructuring and return on assets for the deposit taking Sacco's in Nairobi County ($\beta= 0.0171$, $p=0. 0.0000$). This implies that a unitary increase in deposit

restructuring led to an increase in the financial performance of deposits taking Sacco's in Nairobi County by 0.0171 units holding other factors constant.

The null hypothesis was therefore rejected and the alternative hypothesis was adopted that debt restructuring has a significant effect on the financial performance of deposit taking Sacco's in Kenya. The findings are in agreement with Rahman and Mazlan (2014) who revealed that minimum deposit increment had a positive effect on performance of microfinance institutions. Ombaka and Jagongo (2018) found that Sacco deposits had a strong positive correlation with performance of deposit taking Sacco's. The findings are in tandem with Harwood, Nakola and Nyaana (2016) found that by providing services to members and customers of different income groups, deposit taking Sacco's accumulates deposits which are stable, low cost source of financing for the growing loan portfolios. The findings are also consistent with Arnone and Pellegrini (2012) indicated that high member deposits are negatively related to increased capital base.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the study findings, its conclusions and recommendations, presented in consideration to the study objectives used to analyze effects of financial restructuring on the financial performance of deposit taking Sacco's in Kenya.

5.2 Summary of Findings

5.2.1 Debt Restructuring and Financial Performance of Deposit Taking Sacco's

The study analyzed the effect of debt restructuring in consideration of external borrowings to total assets and financial performance of Deposit Taking Sacco's. Correlation results indicated that debt restructuring had a positive and significance relationship on return on assets for the deposits taking Sacco's in Nairobi County. Regression results indicated a positive and significant relationship between Debt restructuring and return on assets for the deposit taking Sacco's in Nairobi County. This implies that a unitary increase in debt restructuring led to an increase in the financial performance of deposits taking Sacco's in Nairobi County by 0.0049 units holding other factors constant. The null hypothesis was therefore rejected and the alternative hypothesis was adopted that Debt restructuring has a significant effect on the financial performance of deposit taking Sacco's in Kenya.

5.2.2 Equity Restructuring and Financial Performance of Deposit Taking Sacco's

The second objective analyzed the effect of equity restructuring in consideration of external borrowings to total assets and Financial Performance of Deposit Taking Sacco's. Correlation results indicated that equity restructuring had a positive and significance relationship on return on assets for the deposits taking Sacco's in Nairobi County. Regression results indicated a positive and significant relationship between equity restructuring and return on assets for the deposit taking Sacco's in Nairobi County. This implies that a unitary increase in equity restructuring led to an increase in the financial performance of deposits taking Sacco's in Nairobi County by 0.0162 units holding other factors constant. The null hypothesis was therefore rejected and the alternative hypothesis was adopted that equity restructuring has a significant effect on the financial performance of deposit taking Sacco's in Kenya.

5.2.3 Deposit Restructuring and Financial Performance of Deposit Taking Sacco's

The third objective analyzed the effect of deposit restructuring in consideration of external borrowings to total assets and Financial Performance of Deposit Taking Sacco's. Correlation results indicated that deposit restructuring had a positive and significant relationship on return on assets for the deposits taking Sacco's in Nairobi County. Regression results indicated a positive and significant relationship between deposit restructuring and return on assets for the deposit taking Sacco's in Nairobi County. This implies that a unitary increase in deposit restructuring led to an increase in the financial performance of deposits taking Sacco's in Nairobi County by 0.0162 units holding other factors constant. The null hypothesis was therefore rejected and the alternative hypothesis was adopted that deposit restructuring has a significant effect on the financial performance of deposit taking Sacco's in Kenya.

5.3 Conclusion

Based on the study findings the study concluded that there is a strong correlation between debt restructuring, equity restructuring and deposit restructuring on return on asset for the deposit taking Sacco's. On debt restructuring, the study concluded that on average, the Sacco's had maintained a low extremal debt to assets ratio of below 25% as required by the regulator (SASRA). The results showed that debt restructuring is positively and significantly related with the financial performance of the deposit taking Sacco's. Under, equity restructuring, the study concluded that on average, core capital by the Sacco's was average in comparison the total loans/assets issued by the Sacco's. This is as required by the regulator that the core capital should not be below 10%. The results further showed that equity restructuring is positively and significantly related with the financial performance of the deposit taking Sacco's. On debt restructuring, the study found that the deposit restructuring that member deposits raised by the Sacco's members for loan issuance was above the total loans to assets by above 80% as required by SASRA the Sacco's regulator in Kenya. The results further showed that deposit restructuring is positively and significantly related with the financial performance of the deposit taking Sacco's. Thus an increase in debt restructuring, Equity restructuring and deposit restructuring would lead to significant increase on return on assets for the deposits taking Sacco's in Nairobi County.

5.4 Recommendation

5.4.1 Recommendation to Theory

The study findings are consistent with supporting theories that have been adopted in the study. The study recommends on the adoption of the Loanable funds Theory where supply of loanable funds is based on savings and the demand for loanable funds is based on borrowing, the interaction between the supply of savings and the demand for loans determines the real interest rate and how much is loaned out. In addition the Liquidity Preference Theory can be adopted in distress since the Sacco's become distressed if they lack the necessary credit for lending and thus the theory bring the relevance of the motives to have the liquid credit for lending.

5.4.2 Recommendation to practice

Based on the positive and significant effect of debt restructuring on financial performance of deposit taking Sacco's, the study recommends that the Sacco management should raise their lending capacity by seeking controlled external borrowing to raise their immediate cash for lending when in distress. However the external borrowing should be controlled to avoid increasing in debts as compared to the total assets. In addition, they should review their by-laws and working policies to ensure that the optimum external financing is encouraged. Although external financing has a very close and linear association with growth of SACCOS' wealth, the borrowing should be designed to ensure that there is maximum growth of wealth obtained from such credit.

Based on the positive and significant effect of equity restructuring on financial performance of deposit taking Sacco's, the study recommends that the Sacco management should maintain their core capital as a Sacco reserve to above 10% compared to total assets. Since the core investments of SACCOS is loans to members and liquid investments show a strong positive relationship with growth of SACCOS' wealth which can be attributed to the fact that liquid investments can be converted into cash easily to meet short-term obligations. SACCOS should properly manage their equity ratios in order to finance liquidity gaps hence enhance stability of SACCOS.

Based on the positive and significant effect of deposit restructuring on financial performance of deposit taking Sacco's, the study recommends that the Sacco management should formulate a mechanism to raise their lending capacity by periodically increasing their minimum member deposits. This will increase the liquid cash for lending which is the core activity of the Sacco.

However the minimum deposit should be structured to accommodate all classes of the depositors to avoid discouraging the members.

5.4.3 Recommendation to Policy

The study recommends that the regulator (SASRA) should lay mechanisms in place to ensure that the financial structure of the Sacco's is maintained. This can be done by continuous assessment of the Sacco's ratios of external borrowings to total assets, core capital to total assets, member deposits to total assets. This will ensure a healthy and strong financial structure for the deposit taking Sacco's.

5.5 Suggestions for Further Research

The findings of this study can be improved if the study is expanded to cover a longer period. A future research can be carried out on the same topic, but using data across a longer period. This is with the assumption that the data for a longer time would provide results that are better than those provided by the data used in this study. The possible higher objectivity that arises based on the sample period may be settled covering a longer period.

In addition, given that Kenya is a key player in the East African community, the study can be expanded to cover other investments firms within the East African community in order to provide result that was useful in that context. A study can be done to cover all the Sacco's in East Africa. Such a study would be used as a referential manuscript when coming up with strategic plans to professionalize the management of Sacco's in a manner to improve their performance.

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APPENDICES

Appendix I: Data Collection Template

Sacco	Year	ROA	External borrowings/ Total Assets	Institutional Capital/ Total Assets	Member deposits/ Total Assets
A	2019				
A	2018				
A	2017				
A	2016				
A	2015				
A	2014				
A	2013				
A	2012				
A	2011				
A	2010				

Appendix II: List of Deposit Taking Sacco in Nairobi County

No	Deposit Taking Sacco
1.	Mwalimu National Sacco Ltd
2.	Stima Sacco Ltd
3.	Harambee Sacco Ltd
4.	Kenya Police Sacco Ltd
5.	Afya Sacco Ltd
6.	Unaitas Sacco Ltd
7.	Ukulima Saco Ltd
8.	United Nations Sacco Ltd
9.	Kenya Bankers Sacco Ltd
10.	Hazina Sacco Ltd
11.	Kencream Sacco Ltd
12.	Safaricom Sacco Ltd
13.	Magereza Sacco Ltd
14.	Sheria Sacco Ltd
15.	Shirika Sacco Ltd
16.	Waumini Sacco Ltd
17.	Airports Sacco Ltd
18.	Maisha Bora Sacco Ltd
19.	Miliki Sacco Ltd
20.	Mwito Sacco Ltd
21.	Nacico Sacco Ltd
22.	Nafaka Sacco Ltd
23.	Nassefu Sacco Ltd
24.	Ardhi Sacco Ltd
25.	Asili Sacco Ltd
26.	Chai Sacco Ltd
27.	Chuna Sacco Ltd
28.	Elimu Sacco Ltd
29.	Comoco Sacco Ltd
30.	Jamii Sacco Ltd
31.	Kenpipe Sacco Ltd
32.	Nation Sacco Ltd
33.	Nyati Sacco Ltd
34.	Metropolitan national Saaco
35.	Tembo Sacco Ltd
36.	Ufanisi Sacco Ltd
37.	Ukristo Na Ufanisi Wa Angalicana Sacco Ltd
38.	Wanaanga Sacco Ltd
39.	Wanandege Sacco Ltd