

**RELATIONSHIP BETWEEN FINANCIAL PERFORMANCE AND
SIZE OF DEPOSIT TAKING SAVINGS AND CREDIT
COOPERATIVE SOCIETIES IN KENYA**

BY

JANE WAWIRA KINYUA

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DECLARATION

This Research project is my original work and has not been submitted in any other University.

SIGNED..... DATE

JANE WAWIRA KINYUA

D61/73156/2012

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

SIGNED.....DATE

MRS. WINNIE NYAMUTE

LECTURER

DEPARTMENT OF FINANCE AND ACCOUNTING

SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

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ABSTRACT

In Kenya's financial landscape SACCOSs play a critical role of financial intermediation. They mostly focus on personal development, small and micro enterprise sector of the economy. SACCOSs are member owned financial institutions that offer savings and credit to members. They accept monthly payments for shares from members which form a pool of funds to serve the credit needs of members. SACCOSs represent a considerable part of the financial sector in respect to access to credit, savings mobilization and wealth creation. The objective of the study was to establish the relationship between financial performance and size of SACCOSs in Kenya. The aim of the study was to establish whether the size of the SACCOSs as measured by total assets, deposits and turnover has an effect on the financial performance as measured by the return on asset ratio.

The study adopted a descriptive survey design and the population of study was all the deposit taking SACCOSs in Kenya licensed by SASRA as at December 2012. The population consisted of 124 SACCOSs and stratified sampling method was used to pick a sample of 30 SACCOSs. The sample consisted of all the three categories of SACCOSs namely, large, medium and small based on the value of the assets. The study used secondary data collected from SASRA offices. The data was extracted from the audited financial statements of the SACCOSs and the period of study was from 2009 to 2012. Regression model and correlation analysis was used to establish the relationship and ANOVA statistic was used to test the significance of the model.

The study concluded that there was a strong relationship between financial performance and size of SACCOSs in Kenya as explained by adjusted R^2 of 0.895% implying that total assets, savings/deposits and turnover contributed 89.5 % of the variation in return on assets. The probability value of 0.005^a was obtained implying that the regression model was significant in predicting the relationship between return on assets and the predictor variables as it was less than $\alpha=0.05$. The study established that savings/deposits played a key role in determining the financial performance of SACCOSs. This study therefore recommends that the management of SACCOSs should devise strategies of increasing savings/deposits. This could be achieved by recruiting more members into the SACCOSs. Members' contributions form the savings/deposit in the SACCOSs which are used to extend loans to members and at the same time members provide ready market for the loans. Loans constitute the highest percentage of the total assets in the SACCOSs and assets are used to generate future revenues.

ABBREVIATIONS / ACRONYMS

SACCOSs:	Savings and Credit Cooperative Societies
SASRA:	Sacco Society Regulatory Authority
FOSA:	Front Office Service Activity
BOSA:	Back Office Service Activity
CAMEL:	Capital Adequacy, Asset Quality, Management and Liquidity
PEARLS:	Protection, Effective Financial Structure, Asset Quality, Rates Of Return and Costs, Liquidity and Signs of Growth
WOCCU:	World Council of Credit Unions

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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Performance is defined as outcomes, end results and achievement; negative or positive arising out of the activities carried out by an organization (Guest, Michie, Conway, and Sheehan, 2003). Financial performance measures how well a firm utilizes its primary mode of business to generate revenue. It entails measuring of the results of a firm's policy and operations in monetary terms based on the allocated resources to most viable projects that generate returns which maximize shareholder's wealth. Financial performance can be measured using different methods but all measures should be taken in aggregation.

The SACCOSs subsector is part of the massive cooperative movement in Kenya which comprise both financial and non financial cooperative societies. The cooperative movement plays a vital role of pooling resources for investment and wealth creation contributing 43% of Kenya's gross domestic product (SASRA report 2010).The critical role played by the SACCOSs subsector is envisioned in the Kenya's development blueprint, the Vision 2030. SACCOSs comprise over 50% of all cooperatives in Kenya and as financial institutions they play a critical role of financial intermediation in Kenya's financial landscape. They mostly focus on personal development, small and micro enterprise sector of the economy (Sacco supervision annual report 2010). The SACCOSs are spread across the 47 counties in Kenya thus offering financial access to the previously excluded Kenyans.

Credit unions are owned and operated by members and their objective could be seen as that of maximizing members' benefits. The benefits may be seen as savings and loan services (Fried, Lovell and Vanden, 1993). Members of a credit union are the ultimate owners and they receive a stake by borrowing below market rate and earn dividends or interest above market rates. In this study the term SACCOS will be used interchangeably with credit unions. To offer the subsidies the union should build more capital by increasing the retained earnings. The figure for net earning is equivalent to retained profit figure of a bank that is financed by shareholders' equity. Members want to earn dividends and the amount is determined by how well the management has deployed the assets of the organization to generate revenue and how the costs components have been managed (Wilcox, 2006a; Bauer, 2007).

Piesse and Townsend (1995) observed that the objective of credit union were relatively complex on one hand they are interested in minimizing the cost of loan and on the other hand they seek a safe and profitable vehicle for savings. They proposed a five model specification for credit unions financial performance starting with purely based profit approach. They further noted that credit unions would be more efficient in minimizing operating expenses, raising non retail funds cheaply and earning high returns on non retail investments. In modeling financial performance of SACCOS it would be appropriate to apply profit maximization approach since it is in line with the principal of maximizing members' benefits as advanced by Fried et al (1993).

1.1.1 Financial Performance

Financial performance measures how well a firm uses it's assets to generate revenue from its primary mode of business. It is a general measure of financial health of a firm over a

given period and compares performance of firms in an industry or industries in aggregation .For a firm to sustain business operations and obtain funds for expansion and growth it must earn sufficient profits (Pandey, 1999).

There are different ways of measuring financial performance which should all be taken in aggregation. Line items such as revenue from operations, operating income or cash flow from operations can be used as well as total unit sales. The analyst may wish to look deeper into the financial statements to seek out marginal growth rate or declining debt using such ratios as Return on Assets (ROA), Return on Investment (ROI) and Return on Equity (ROI).

According to Piesse and Townsend (1995) members of credit unions are interested in minimizing the cost of funds for loans while at the same time seeking a safe and profitable avenues for their savings and this makes their objective rather intricate .Thus credit unions would be more efficient by minimizing the operating expenses and raising non retail funds cheaply while earning high returns on non retail investment.

1.1.2 Size

Large companies enjoy Economies of scale since their cost of capital is lower than in small firms. Economies of scale are the major rationale behind mergers and takeovers. There is a limit as to how big an organization can grow in order to achieve the economies of scale. After attaining a certain size the diseconomies of scale sets in as it becomes expensive to manage large organizations due to complexity, inefficiencies and bureaucracy.

According to Gibrat (1931) in the law of proportionate effect, growth is unrelated to firm size implying that both large and small firms have the same probability of growth at any rate within a given period. Tschoegl (1983) postulate three testable propositions which are derived from the law of proportionate effect. The first one is that the growth rates are independent of the size of the firm, secondly on average the growth for any individual firm does not necessarily persist from one period to another. Thirdly the variability in the growth of a firm is not dependent on the size. Studies have found that the growth of small firms is faster and more variable than that of larger firms (Wagner, 1992; Dunne and Hughes, 1994; Hart and Oulton, 1996).

1.1.3 The relationship between financial performance and size

The underlying theoretical base that explains the relationship between size and financial performance is the concept of economies of scale. The economies of scale may occur due to various reasons which include financial, organizational and technical reasons .The financial determinants of economies of scale occur due to size where large firms enjoy better interest and discount rates due to buying in large quantities (pervan, 2012)

Large firms enjoy economies of scale and higher negotiation power over their clients and supplier (Serrasqueiro and Nunes, 2008; Mansfield, 1962; Singh and Whittington, 1975). Large firms have easy access to credit for investment and a range of human capital that is qualified .They are also likely to attain greater strategic diversification (Yang and Chen 2009). In line with this concept a positive relationship is expected between size and financial performance of a firm.

The hierarchy in small firms puts them in strategic position to counter the disadvantages arising from their size. They experience less agency problems and are more flexible in a changing environment. Serrasqueiro and Nunes (2008) found a positive relationship between size and performance in SMEs but not for large firms. According to Diaz and Sanchez (2008) SMEs were more efficient compared to large firms. This was supported by Hall et al (1987) who found an inverse relationship between firm size and performance.

1.1.4 The Sacco industry in Kenya

The Savings and Credit Cooperative societies (SACCOSs) form a significant part of the larger cooperative society in Kenya. Cooperatives can broadly be categorized as financial Co-operatives (Savings & Credit Co-operative Societies-Saccos) and non-financial Co-operatives (includes produce, marketing, housing, transport and investment cooperatives).

SACCOS are member owned financial institutions that offer savings and credit to members. They accept monthly payments for shares from members who may borrow an amount equivalent to two or three times their own savings if they can get other members to guarantee them. SACCOSs have membership across different economic activities in both rural and urban areas. They are engaged in Front office Services Activities (FOSA) and Back Office Services Activities (BOSA).The SACCOS operating FOSA offer near retail banking business operations (Kenya Financial Stability Report 2010).

SACCOSs comprise over 50% of all cooperatives in Kenya and as financial institutions they play a critical role of financial intermediation in Kenya's financial landscape

focusing mostly on personal development, small and micro enterprise sector of the economy (Sacco supervision annual report 2010).

The Cooperative Societies Act (1997) as amended in 2004 provides the legal framework for promotion, registration and development of Cooperatives in Kenya. Sacco Societies Regulatory Authority (SASRA) is a creation of the Sacco Societies Act (2008) and was inaugurated in 2009 charged with the prime responsibility to license and supervise deposit taking SACCOS Societies in Kenya. Financial co-operatives or SACCOS are formed by individual members with the primary purpose of pooling savings and lending to each other as per the registered by laws. In the early 1990s, Kenya experienced difficult economic times forcing commercial banks to demand higher minimum operating balances for individual accounts to sustain their businesses. This saw many middle and low income persons unable to operate bank accounts. SACCOSs responded by introducing a Front Office Service Activity (FOSA) which offered quasi banking services at competitive rates opening a new chapter in the SACCOS business (Sacco supervision annual report 2011).

According to Sacco Societies Act (2008) the core capital of SACCOSs consists of fully paid up members' shares, retained earnings, disclosed reserves, grants and donations all of which are not meant to be expended unless on liquidation of the Sacco society. The Institutional capital refers to the portion of the core capital that belongs to the SACCO society as an institution such that no member can individually lay claim on it. Institutional capital consists of core capital less members share capital.

The minimum core capital for a SACCOS should at all times be Kshs.10 million and this must be met before a license is issued. This is to protect or cushion members' deposits and creditors against losses resulting from business risks that SACCOSs face as financial institutions and it also promotes public confidence in the institution.

1.2 Research Problem

In Kenya SACCOSs play a critical role in the financial landscape through financial intermediation. They focus on personal development of small and micro enterprise sector of the economy. SACCOSs represent a considerable part of the financial sector in respect to access to credit, savings mobilization and wealth creation. As at December 2012 the total assets of the SACCOSs subsector stood at kshs 293.5 billion with a total deposits of kshs 211.8 billion and the loans to members stood at kshs 220.8 billion (SASRA supervisory report 2012).

The introduction of FOSA in the SACCO Society industry opened a new chapter in the SACCOS business which led to SACCOSs offering quasi banking services at competitive rates. This did not spare the SACCOSs the business risks faced by financial institutions. To protect members' deposit and creditors against losses resulting from the business risks, the Sacco Societies Act (2008) responded by defining what constitutes the capital for the SACCOSs and the minimum capital required for deposit taking SACCOSs.

Richardson (2002) noted that growth in total assets; loans and institutional capital were important determinants of financial performance of a credit union. He observed that the ideal for all credit unions was to achieve real positive growth each year. He further noted that loan portfolio was the most important and profitable asset of the credit unions

and if growth in total loans was to keep pace with growth in total assets, then there was a likely hood of maintaining profitability. Sebhatu (2011) studied the outreach and sustainability of SACCOSs in Ethiopia and found a positive relationship between size and operational efficiency of SACCOS.

Capon et al (1990) studied the determinants of performance he found that the size of the firm had a negative relationship with financial performance of the firm. Wincent (2005) carried out an empirical study to develop and test a framework on how size can affect firm behavior and performance of SMEs and found that size was a determinant of performance. Belkaoui et al (1993) found that ownership structure, diversification strategy and size affect the performance of a firm.

Several studies have been carried out in Kenya on financial performance. Aduda (2011) carried out a study to examine the relationship between executive compensation and firm performance in the Kenya banking sector. The results showed a significant negative relationship between size and compensation. Mburu (2010) carried out a study on the determinants of performance in SACCOS in Kenya he found the demand for loans as the greatest variable determining performance followed by capital adequacy and infrastructure management. Muthoni (2010) carried out a study to determine the relationship between corporate governance, ownership structure and financial performance. The results showed a positive relationship between size, non executive director, leverage and return on asset. Onyango (2012) carried out a survey to establish the relationship between membership and financial performance of SACCOS in Kenya. The results showed that membership had a significant relationship with financial performance. Atieno (2012) carried out a study to establish the relationship between

board monitoring and financial performance of the companies listed at the NSE and the results showed a strong relationship between board size and performance.

Review of literature indicates that a lot of studies have been carried out on financial performance in relation to different variables and in different industries. However, similar studies on the relationship between financial performance and size of deposit taking SACCOS in Kenya are lacking. Therefore the focus of this study was to establish the relationship between financial performance and size of deposit taking SACCOS in Kenya.

1.3 Objective of the study

To establish the relationship between financial performance and size of deposit taking Savings and Credit Cooperative Societies in Kenya.

1.4 Value of the Study

The Sacco sub sector has played a significant role in spurring Kenya's economic growth through the mobilization of domestic savings. This study will provide baseline information to the policy makers and regulatory authority that will guide them in formulating policies to enhance the performance of SACCOS in Kenya.

To the SACCOSs this study will give an insight to the management on how different variables affects the financial performance of the SACCOS. This will help in formulating strategies to increase the size of the variables that affect the performance more positively. Members of SACCOS will appreciate how their savings contribute to the financial performance of the SACCOS. To the academicians, it will give an insight to those who wish to pursue further research on financial performance in the SACCOSs subsector.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter focuses on the theory of financial performance and empirical evidence on the relationship between financial performance and size. It reveals the existing knowledge gap that necessitates this study.

2.2 Theoretical frame work

There are various theories that have been put across to explain performance; they include Agency theory, Stewardship Theory and organizational theory.

2.2.1 Agency Theory

Jensen and Meckling (1976) observed that managerial action depart from maximizing shareholders return thus leading to the agency problem. There are two main concerns in the principal agent relationship. The first one is the expense involved in monitoring the agent's behavior and routine actions while the second one is the divergent attitudes held by principal and the agent towards risks (Eisenhard 1989). These problems result to agency costs which are incurred by the principal / owner in an attempt to ensure that managers act in the interest of the principal (Jensen 1976). Separation of ownership and control is critical to ensure good corporate financial performance which maximizes returns to share holder. According to the theory, in the presence of information asymmetry the agent (directors and the managers) may pursue interest that may hurt the owners. This was supported by Fama (1980) and Ross (1973).

2.2.2 Stewardship theory

The theory suggests that the agents are trustworthy and good stewards of resources entrusted to them under their care thus making monitoring useless (Donaldson and Davis, 1991, Schoorman and Donaldson, 1997). The theory holds a divergent view from the agency theory which assumes that managers act in their own self interest rather than of the organization.

According to Donaldson and David (1991) managers and board of directors are satisfied and motivated when the organizational objectives are achieved. Steward desire a greater utility by satisfying organizational objectives than in self serving behavior and are concerned about personal reputation. This drives them to achieve better financial performance for their organizations. According to the theory personal satisfaction gained through achievement of organizational goals, respect for authority and work ethics of the organization influences steward actions. The theory contends that inside directors contribute to superior financial performance as opposed to external directors.

Inside directors are better placed to serve the organization since they understand it better. They make sound financial decisions which leads to higher financial performance (Donaldson & David, 1991; Davis *et al*, 1997).According to the traditional legal view a corporation is a legal entity where directors have a fiduciary duty to shareholders. The steward theory contend that managers behave like stewards to serve the interest of the shareholders and work diligently to attain higher levels of return .The separation of ownership promotes development of managerial profession which is beneficial for corporate performance and shareholders wealth. Thus when managers are empowered to exercise unencumbered authority and responsibility it leads to maximization of corporate profit and shareholders' value (Donaldson and Davis 1994)..

2.2.3 Organizational theory

The theory explains the effect of firm size and age on firm performance. Baumunn and Kaenn (2003) came up with organizational theory to explain firm size in relation to profitability. The theory also explains the relationship with organizational transaction costs, agency costs and span of control costs. Dean et al (1998) observed that firm size is related to financial performance due to industry Sunk costs, concentration, vertical integration and the overall industry profitability.

According to Daft (1995) large sized firms have multi layer levels of management, specialized skills and functions and more departments. Management control is highly centralized making large sized firms to be highly bureaucratic than small sized firms. The large firms easily miss out on profitable opportunities.

Organizational theorists like Meyer and Tucker (1989); Miller and Chen (1994); Aldrich and Austen (1986) attribute firms' size and age to inertia. Inertia is an inadequate or slow adaptation to change or resistance to fundamental changes in conducting business which may cause the firm to miss profitable opportunities.

Penrose (1959) observed that large firms generate superior performance due to their diversified capabilities and ability to exploit economies of scale fully. They have a formalized procedure of conducting business and this makes implementation of operations more effective. Leibensten (1976) and Stephard (1986) held a different view, they argued that the size of the firm is correlated to market power which leads to markets power inefficiencies thus leading to inferior performance.

2.3 The Relationship Between Financial Performance and Size

MacMillan and Day (1987) considered that rapid growth lead to higher profitability due to the fact that new firms enter markets quickly and on a large scale and thus become more profitable. Hall & Weiss (1967) found a positive relationship between firm size and profitability that reversed itself among the firms with the largest assets. Amato & Wilder (1985) observed the potential for a negative relationship presented within the theory of the firm, which focuses on alternative theories of a firm's motivation. An important contributions from this theory is that managerial utility maximization may replace profit maximization as the firm's objective function (Alchian, 1965).

Managerial utility maximization which is a by product of the separation of ownership from management in modern corporations may increase the size of the firm. The separation would make large firms more vulnerable to managerial utility maximization than smaller firms. Managerial utility maximization thus provides a conceptual framework for a negative relationship between firm size and profitability. An integration of the above mentioned literature implies that the relationship between firm size and profitability may be positive over some firm size ranges and negative for others. Amato and Wilder (1985) posit that once a threshold size is attained additional increases in size may further separate ownership from control. These arguments imply that the relationship between firm size and profit can become negative beyond the threshold of the size of a firm.

Stekler (1964) observed that variation over a period of average profitability for small and large firms was less than that of medium size firms. Baumol (1967) postulate that there is a positive relationship between firm size and profits. This was supported by Velnampy

and Nimalathan (2007) who noted that sales were positively associated with profitability ratios except ROE, while number of depositors was negatively correlated to the profitability ratios except ROE. The number of advances was also negatively correlated to the ROI and RAA.

The nature of the relationship between firm size and profitability is an important issue that may shed some light on the factors that maximize profits. Related studies found that growth rate is a significant determinant of profitability. Using the growth rate of firm assets Lindsey (1981) accounted for the effect of change in profit resulting from change in demand or cost. Profitability could be related to changes in output as a result of either increased demand or reduction of costs. The reduction in costs could come directly from investing in more productive capital equipment while increased demand could stimulate expansion on the part of the firm. Thus a positive relationship would be expected between profitability and growth rate.

2.4 Financial Performance Measures

Among the common rating tools of financial institutions performance are PEARLS and CAMEL ratios. The World Council of Credit Unions (WOCCU) developed the PEARLS methodology for evaluating and monitoring financial stability of credit unions. PEARLS is an acronym name for protection, effective financial structure, asset quality, rates of return and cost, liquidity and signs of growth. It is a set of 45 financial ratios used to evaluate and monitor the financial stability of credit unions within WOCCU. CAMEL is an acronym for five aspects of microfinance institutions performance namely; capital adequacy, asset quality, management, earnings and liquidity and is a preferred rating tool used by financial institutions in Kenya including SACCOs. It has been adopted as an

offsite evaluation tool to identify SACCOSs that are financially vulnerable and need increased supervisory attention. CAMEL uses return on assets (ROA) which is expressed as surplus (before interest on deposit and tax) as a percentage of total assets to measure the earnings rate .

According to Anathasoglou (2005) profitability of financial institutions is expressed as a function of external and internal determinants. The external determinants are caused by external factors that are beyond the control of management .They include the market environment, legal and economic factors. Kaplan and Norton (1992) observed that it would be unfair to use market based methods like share prices to evaluate financial performance since they incorporate external market factors that are beyond the manager's control. Security prices would be applicable in measuring financial performance where the markets are efficient. The internal determinants of profitability are specific to the financial institution and emanate from the financial statements.

According to Pandey (1997) Financial analysis is the process of critically examining the accounting information provided in the financial statements and reports, bringing out the relationship and interpreting the results. Ratio analysis is a tool that is frequently used in evaluation of financial performance. The financial statement analysis involves comparing the firm's performance with that of other firms in the same industry and evaluating trends in the firm's financial position over time. Financial ratios provide a useful tool of evaluating financial statements (Brigham and Ehrhardt, 2005),

Cornett et al (1999) posit that one way of identifying weaknesses and problem areas of financial institution is analysis of financial statement using ratio analysis. There are two

approaches to financial statement analysis. The first approach is called time series analysis which is used when the intention is to evaluate ratios of a financial institution over a period of time to track down its performance over time. The second approach is cross sectional analysis and it is used when the intention is to compare the performance of a financial institution relative to that of competitor financial institutions at a particular point in time.

Athanasoglou *et al* (2005) used two measures to represent bank profitability: return on assets (ROA) and return on equity (ROE). They observed that ROA reflects the ability of a bank's management to generate profits from bank's assets. ROE indicates the return to shareholders on their equity and equals ROA times the total assets-to-equity ratio. Dogan (2001) used return on assets (ROA) to measure the profitability of banks in Turkey. Sebhatu (2011) used return on assets ((ROA) to measure financial performance of SACCOSs in Ethiopia.

According to Fried *et al* (1993), it is appropriate to apply the profit maximization approach in modeling financial performance in SACCOSs since it does not negate the principal of maximizing the benefit to members. Members want to earn dividends and the amount is determined by how well the management has deployed the assets of the organization to generate revenue and how the costs components have been managed. Members of a credit union are the ultimate owners and they receive a stake by borrowing below market rate and earn dividends or interest above market rates. To offer the subsidies the union should build more capital by increasing the retained earnings. The figure for net earning is equivalent to retained profit figure of a bank that is financed by shareholder equity (Wilcox, 2006a; Bauer, 2007).

Among the key measures of a firm's performance is profitability, size and survivorship (Cassis and Brautaset 2003). Return on asset (ROA) reflects the ability of management to generate profits from the assets of the firm, Return on Investments (ROI) reflects the ability of management to generate profits from the investments of the firm while Return on Equity (ROE) reflects the ability of management to generate profits from the equity employed by the firm

2.5 Empirical evidence

Dogan (2013) carried out a study to investigate the effect of size on profitability of companies that were active in Istanbul Stock Exchange (ISE) between the years 2008 to 2011 using a data of 200 companies. Return on Assets (ROA) was used as an indicator of firm profitability while total assets, total sales and number of employees were used as proxies for size. The control variables were age of the company, liquidity and leverage based on the assumptions that these variables could affect profitability. Multiple regression model and correlation were used for data analyses. The result of the study showed a positive relation between size and profitability of the companies. The control variables; age of the companies and leverage were found to have negative relationship with ROA, but liquidity rate and ROA had a positive relationship. The current study adopted the same model but the proxies of size in this study were total assets , deposits / savings and turnover of the SACCOSs. The measure of financial performance was return on asset as measured by net income before deposit and tax expressed as a percentage of total average assets.

Hassan and Halbouni (2013) carried out a study on a sample of 95 united Arab Emirate listed firms to establish the effect of corporate governance on financial performance. Cross sectional regression analysis was applied to test the relationship between governance mechanism and financial performance based on ROA and ROI. The results of the study showed that voluntary disclosure, CEO duality and board size significantly influenced performance. The findings were supported by the study carried out by Sheik et al (2013) on Parkistan firms. The study was carried out on non financial firms listed in Karachi stock exchange between 2004 to 2008. The results showed that board size was positively related to financial ROA and earnings per share, while managerial ownership was negatively related to ROA and earnings per share.

Bisher (2012) carried out study to determine the relationship between size and financial performance of commercial banks in Kenya. The study was carried out on 43 banks for the period of 2000 to 2001 using multiple regression and correlation analysis. The findings of the study showed a weak relationship between size and financial performance but the relationship was statistically significant. Odiambo (2012) carried out a study to establish the influence of financial risk management on financial performance of Kenya commercial banks. Regression analysis and correlation were used to establish the relationship. The results of the study were that financial risk management practice had a positive relationship with financial performance of the banks. A study was carried out by Kitonga (2012) to establish the relationship between financial performance and corporate social responsibility on companies quoted in Kenya. A Sample of 32 companies quoted on the NSE was selected. The study found a strong relationship between size and corporate social responsibility suggesting that large firms were more viable

Nichasio (2012) carried out a study in Nairobi County to establish the relationship between management practice and financial performance he found that key policies on optimal cash utilization and investment had a positive relationship with financial performance. Onyango (2012) carried out a survey on selected SACCOS to establish the relationship between membership and financial performance of SACCOS in Kenya. The results showed that membership had a significant relationship with financial performance. Atieno (2012) carried out a study to establish the relationship between board monitoring and financial performance of the companies listed at the NSE. There was a strong relationship between board size and performance. Aduda (2011) carried out a study to examine the relationship between executive compensation and firm performance in the Kenya banking sector. The results were that there was a significant negative relationship between size and compensation.

Koraba (2011) carried out a study to determine the relationship between capital structure and financial performance of MFIs in Kenya. The study used logistic regression in analyzing data from MFIs in Kenya for the year 2009. The results showed that outreach and portfolio size had a positive effect on financial performance of MFIs. Wagio (2010) carried out a study on 30 micro, small and medium size enterprises in Embu town. The aim of the study was to establish the relationship between access to micro finance service and financial performance using regression analysis. The results showed a positive but

weak relationship between size of loan disbursed and return on assets. A comparative study was carried out in the Ceylon banks by Velnampy and Nimalathan (2010) to establish the effect of firm size on profitability. The primary focus of the study was to investigate the relationship between the Firm size and profitability of Bank of Ceylon (BOC) and Commercial Bank of Ceylon Ltd (CBC) in Sri Lanka including local and foreign branches. The study was carried out in 301 local banks and 3 overseas local branches. The study covered a period of ten years and correlation analysis was used to establish the relationship. The results showed a positive relationship between the size of the firm and Profitability in Commercial Bank of Ceylon Ltd, but there was no relationship between firm size and profitability in the Bank of Ceylon.

Muthoni (2010) carried out a study to determine the relationship between corporate governance, ownership structure and financial performance of the insurance companies listed at the NSE. The results showed a positive relationship between size, non executive director, leverage and return on asset. There was a positive relationship between board size, constitution, leverage and return on equity. Noella (2010) carried out a study on eight micro finance institutions in Burudi to establish the relationship between outreach and financial performance in MFIs. The results showed that the average loan size was insignificant in explaining the profitability of the Microfinance institutions. The number of active loan accounts and number of women borrowers was insignificant in explaining the profitability of MFIs in Burudi. Nyamwange (2010) carried out a study to determine the relationship between credit management and financial performance of SACCOs in Kenya. He found that there was a positive relationship between credit risk management and financial performance of SACCOS in Kenya.

Kosmidou (2008) carried out a study to determine bank's profitability in Greek during the period of European Union financial integration .He used an unbalanced pooled time series dataset of 23 banks The study found that high return on average assets (ROAA) was found to be associated with well-capitalized banks and lower cost to income ratios. Size was positive in all cases but was statistically significant only when the macroeconomic and financial structure variables were used in models. Orlitzky (2001) carried out a study to determine whether size confounds the relationship between corporate social performance and financial performance. He Carried out a meta analysis on corporate social performance, size and financial performance of more than two decades. He used path analytical model and the results showed a positive relationship between size and corporate social performance and size and financial performance.

2.6 Summary of the Literature Review

The organizational theory postulate that firm size and age affect financial performance. Large firms may contribute to the financial performance or may easily miss out on profitable opportunities due to their highly bureaucratic nature. Agency theory suggests that management may contribute to the negative financial performance if they pursue divergent goals from those of the organization. While the stewardship theory postulate a positive contribution to the performance of the firm by stewards, managers and board of directors. From the empirical review some studies find either strong positive or negative relationship between firm sizes and financial performance while other studies find a weak relationship. The evidence also reveals that there are various factors that determine the financial performance of a firm in different industries using different measures. The identified gap from both the empirical and theories' review is that they do not postulate

the relationship between financial performance and size of deposit taking savings and credit cooperative societies in Kenya .This provides the motivation for this research.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter details the methodology for the research. It specifies the research design, the target population, the sampling framework of the population, the type of data and data collection method. The analysis of data and the presentation is outlined as well.

3.2 Research Design

The research design was a descriptive survey to gather information on the relationship between financial performance and size of deposit taking SACCOSs in Kenya. According to Borge and Gall (1989) descriptive surveys designs are used in preliminary and exploratory studies to allow a researcher to gather information, summarize, present and interpret for the purpose of clarification. The aim of the study was to ascertain whether there is a relationship between financial performance and size of SACCOS, thus the descriptive survey was found to be an appropriate design for the study. The study focused on all deposit taking SACCOS in Kenya and data was collected from SASRA offices covering a period of four years.

3.3 Study Population

Ngechu (2004) defines population as a well defined or set of people, services, events, group of things or households that are being investigated. The target population should exhibit some observable characteristics which the researcher seeks to generalize the results of the study (Mugenda, 2003). The target population was all deposit taking SACCOS in Kenya that were licensed by SASRA as 31st December 2012, the number stood at one hundred and twenty four. Deposit taking SACCOSs are spread across the 47

counties in Kenya and control 79% of the total assets in the SACCOSs subsector (Kenya financial stability report 2011).

3.4 Sample Design

The sample was drawn from the target population of 124 deposit taking SACCOS in Kenya that were licensed by SASRA as 31st December 2012. The study utilized stratified random sampling approach. A stratified random sample increases the statistical efficiency and enables different research methods and procedures to be used in different stratas. An ideal stratification ensures each stratum is homogeneous internally and heterogeneous with other stratas (Cooper and Schidler 2011). Three stratas were constructed based on the size of the total assets, consisting of big, medium and small SACCOSs. The stratification was done in order to ensure that all the different SACCOSs sizes were represented in the sample. After the stratification a random sample was drawn from each stratum to avoid any biases. A sample of 30 SACCOSs was drawn from the target population, which represented about 24% of the target population. The table below represents the three stratas based on the size of the assets. Refer to appendix V1 for the list of the selected SACCOSs.

Table 3.1: The three stratas based on the asset size

Asset Size in khs	Size of SACCOS	No of SACCOS
4 Billion and above	Large	10
between 1 and 4 billion	Medium	10
Less than 1 billion	Small	10

3.5 Data Collection

Secondary data was collected from SASRA offices based at Britam center in Upper hill. The data was extracted from the audited financial statements of the selected SACCOs specifically from the comprehensive income statement and the statement of financial position. The data was collected with the aid of a specially designed data collection sheet to fit the information required (refer to appendix V). Key financial ratios on measurement of financial performance and size were derived from the financial data. The data collected covered a period of four years from 2009 to 2012 which was considered long enough to offer meaningful insight concerning any relationship between the variables.

3.6 Data Analysis

Data analysis is the process of bringing order, structure and interpretation of the mass of collected data (Marshall and Rossman, 1999). The data was analyzed with the aid of the statistical package for social sciences (SPSS) program since it has a wide coverage of statistical and graphical data analysis. The financial performance was measured by the return on asset (ROA) ratio. The measure of size was the natural logs of the total assets, deposits/savings and turnover.

3.6.1 Analytical Model

A Multivariate regression model was used to determine the relationship between financial performance and size. The regression model used was as follows;

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

Where;

Y is the return on asset (ROA)

β_0 is a constant and represents the value of y when x is 0.

β_1 - β_3 represents the regression coefficients which measures the average change in the value of the dependent variable

X1 is the natural log of total assets

X2 is the natural log of turnover

X3 is the natural log of Deposits/savings

ε is the error term.

The study used return on asset (ROA) as a measure of financial performance. Net income before tax and interest on members deposit was expressed as a percentage of average assets. The proxies for size of SACCOSs were the value of total assets, deposits/savings and turnover expressed as natural logs.

The model was able to establish the relationship between financial performance and size of SACCOSs. To determine the proportion of the change in the performance that is explained by the relationship between performance and size a multiple coefficient of determination (R^2) was used and to test whether the overall model was significant ANOVA statistic was used. Dogan (2013) used the same model to determine the effect of size on profitability of companies quoted on Istanbul security exchange. Profitability was measured by return on assets and the proxies of size were natural log of total assets, natural log of total sales and number of employees.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presents the analysis of data as stipulated in the research methodology and the findings of the study as set out in the research objective. The study targeted all the deposit taking savings and credit cooperative societies in Kenya. The period covered was four years from 2009 to 2012. The source of data was Sacco Society Regulatory Authority (SASRA). The study findings were presented in order to establish whether there is a relationship between financial performance and size of deposit taking SACCOS in Kenya.

The order of presentation is as follows: The chapter first presents the results on return on assets then results on the trend of the total assets, savings/deposits and turnover. The results of the regression analysis, summary and interpretation of the findings are then presented.

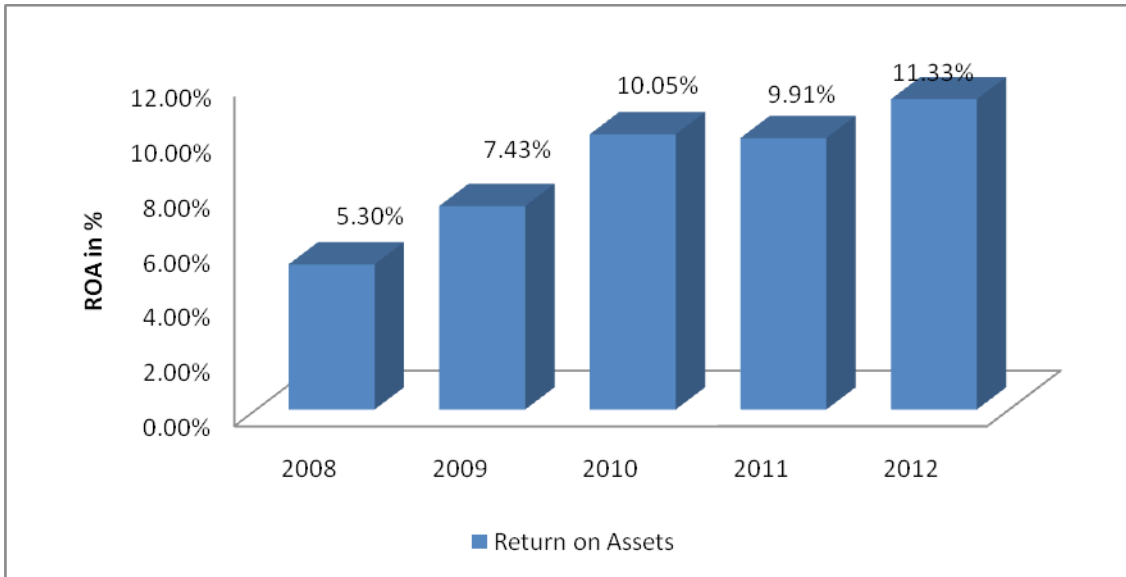
4.2 Data Analysis and Findings

Complete data was available for 15 SACCOSs (50 %) of the sample size and this is the data that was used for analysis. The period of study was four years and 60 data points were generated for the analysis.

4.2.1 Return on Assets

The study sought to establish the returns on assets of the SACCOs over the study period which was measured by net income per total assets. The data findings are presented in figure 4.1 below and appendix I.

Figure 4.1: Return on Assets

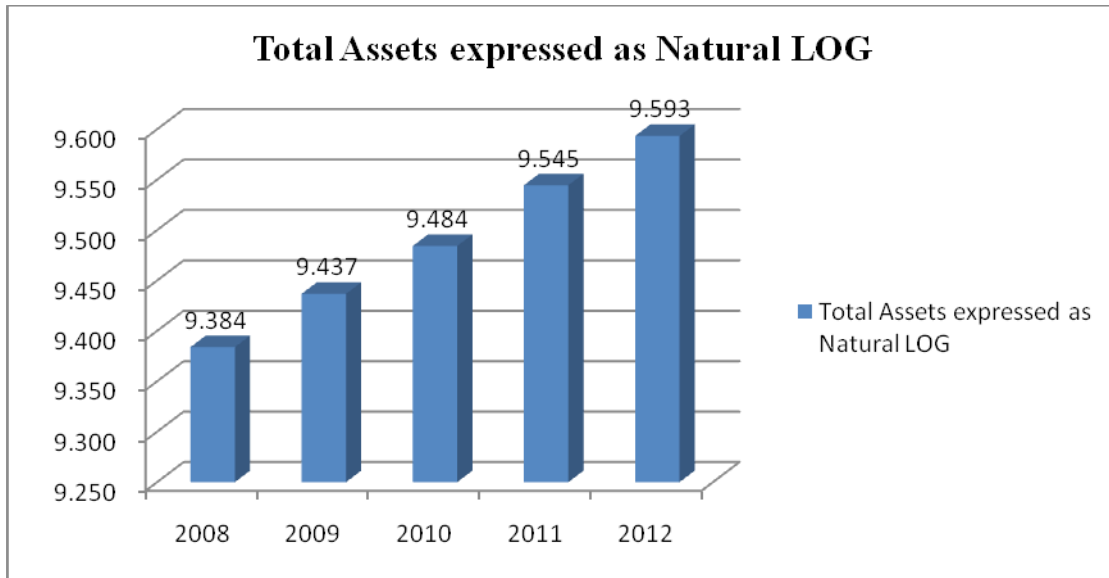


From the study findings, the return on assets as at the inception year 2008 was 5.30%. This increased slightly to 7.43% in 2009. As at the year 2010, the returns on assets had increased to 10.05% which was followed by a slight decrease to 9.91% in 2011 which picked an upward trend to a reach a high of 11.33% in 2012. Generally, the study findings show that returns on assets were increasing over the period of the study despite the slight decrease in 2011.

4.2.2 Total Assets

The study sought to establish the trend in the total assets over the study period. The total assets were standardized by expressing them as natural logarithms. The data findings are presented in figure 4.2 below and appendix II.

Figure 4.2: Total Assets

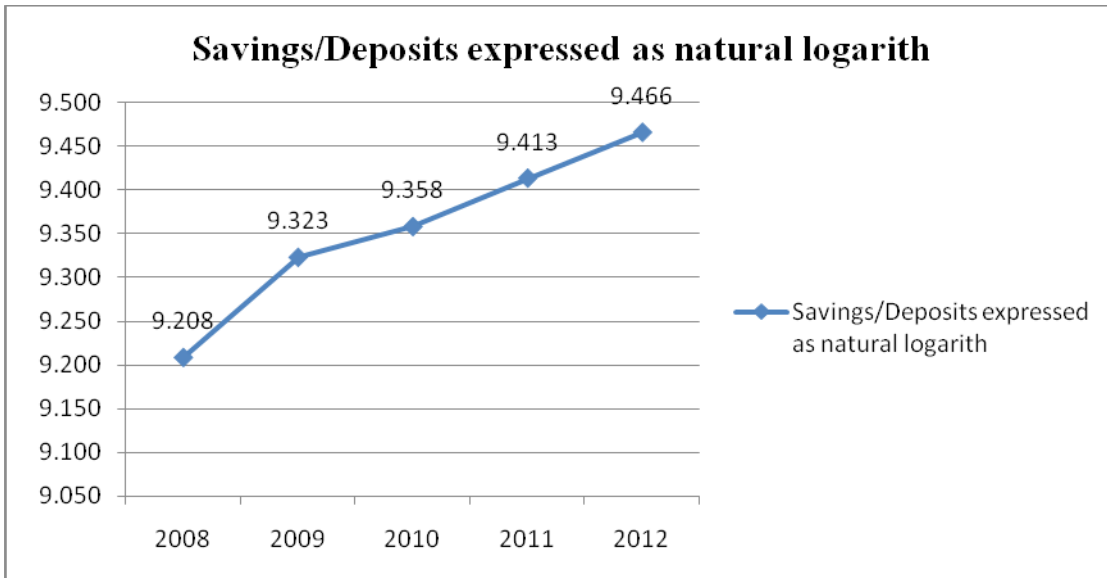


From the study findings the total assets were increasing continuously over the study period. In the inception year 2008, the total assets as expressed as natural log amounted to 9.384 after which it increased to 9.437 in 2009 then to 9.484 in 2010 and further to 9.545 in 2011. As at the year 2012, the log of total assets increased to an all time high of 9.593.

4.2.3 Deposit/Savings

The study also sought to establish the distribution and trend of deposits/savings in the SACCOSs during the study period. The Deposit/Savings for the study period were standardized by expressing them as natural logarithms. The findings are as shown in the figure 4.3 below and appendix III:

Figure 4.3: Deposits/Savings



From the findings, the savings/deposits, expressed as natural logarithm, stood at 9.208 at the onset of the study then increased slightly to 9.323, 9.358, 9.413 and finally 9.466 for the years 2008, 2009, 2010, 2011 and 2012 respectively. It can be observed that the level of deposits/savings increased over the study period.

4.2.4 Turnover

The study also sought to establish the movement of Turnover in the SACCOs during the study period. The Turnovers for the study period were standardized by expressing them as natural logarithms. The findings are as shown in the figure 4.4 below and appendix IV:

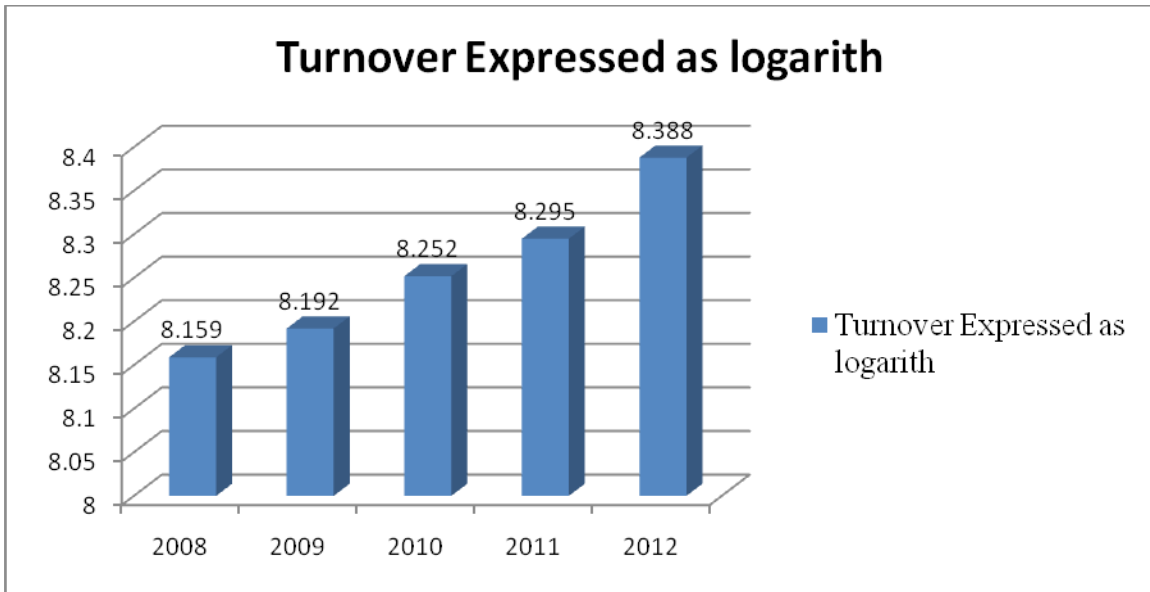


Figure 4.4: Turnover

From the findings, the turnover, expressed as natural logarithm, started on a low of 8.159 in the inception year 2008, then increased to 8.192 in 2008, then to 8.252 in 2010 and further to 8.295 in 2011. As at the 2012 the turnover had increased to an all time high of 8.388. Generally, the turnover of the SACCOs had been increasing continuously over the study period.

4.3 Regression Analysis

In order to test the relationship between return on asset (dependent variable) and the independent variables (Log of savings/deposits, log of total assets and log of turnover) a regression analysis was done. The study conducted a multiple regression analysis since the study had more than two variables. The findings were as shown in the table 4.1 below:

Table 4.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.987 ^a	.974	.895	.0061900
a. Predictors: (Constant), Log of Turnover, Log of Total Assets, Log of Deposits				

Coefficient of determination explains the percentage of variation in the dependent variable that is explained by the independent variables. It is used to explain the extent to which changes in the dependent variable can be explained by the change in the independent variables.

From the analysis, the independent variables (Log of Turnover, Log of Total Assets, Log of Deposits) in this study contributed 89.5% of the variation in return on assets as explained by adjusted R² of 0 .895.

The study conducted an Analysis of Variance, in order to test the significance of the model. The findings were as shown below:

Table 4.2: ANOVA

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	3	.000	16.368	.005 ^a
	Residual	.000	1	.000		
	Total	.001	4			
a. Predictors: (Constant), Log of Turnover, Log of Total Assets, Log of Deposits						
b. Dependent Variable: Return on Assets						

From the ANOVA results, the probability value of 0.005^a was obtained implying that the regression model was significant in predicting the relationship between return on assets and the predictor variables as it was less than $\alpha=0.05$.

Table 4.3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.069	7.392		1.497	.045
	Log of Total Assets	-.045	.238	-.195	-.188	.882
	Log of Deposits/savings	1.318	.767	6.750	1.717	.036
	Log of Turnover	-23.562	13.319	-5.652	-1.769	.028

a. Dependent Variable: Return on Assets

The researcher conducted a regression analysis so as to determine the relationship between independent variables (total assets, deposits/savings, turnover) and dependent variable (return on assets). The following regression equation was obtained:

$$Y = 11.069 - 0.045X_1 + 1.318X_2 - 23.562X_3$$

From the regression model obtained above, holding all the other factors constant, the return on assets will be 11.069. A unit change in total assets expressed as a logarithm holding other factors constant will change the returns on assets by - 0.045; A unit change in log of deposits/savings holding other factors constant will change return on assets by 1.318 while unit change in turnovers expressed as natural logarithm, holding other factors constant will change the returns on assets by **-23.562**. This implied that deposit/savings had the highest influence on return on assets followed by total assets then turnover.

The obtained regression equation further implied that there was a direct relationship between return on assets and the deposits/savings while there was an inverse relationship between return on assets and the turnover and return on assets and total assets.

The analysis was undertaken at 5% significance level. The criteria for comparing whether the predictor variables were significant in the model was through comparing the corresponding probability value obtained and $\alpha=0.05$. If the probability value was less than α , then the predictor variable was significant otherwise if it is greater than α , it is not significant. Both deposits/savings and turnovers were significant in the model as their corresponding probability were 0.036 and 0.028 respectively which was less than 0.05 while total assets was insignificant as its corresponding probability value was 0.882.

4.4 Summary and Interpretation of Findings

The objective of the study was to establish the relationship between financial performance and size of deposit taking SACCOSs in Kenya. The study analyzed the relationship using a regression model. The study findings established that there was as a strong and direct relationship between return on assets and the deposits/savings while there was an inverse relationship between return on assets and the total assets as well as return on assets and turnover as found out in the regression model.

With regard to returns on assets, the study findings established that the return on assets was increasing continuously over the study period despite few fluctuations. On total assets the study found out that it was on increase over the study period in the most of the SACCOSs.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter presents the summary of key findings of the study, conclusions drawn from the study and findings are highlighted. Then the policy recommendations, limitations and suggestions for further study are presented. This study aimed at determining the relationship between financial performance and size of deposit taking SACCOs in Kenya.

5.2 Summary

The objective of the study was to establish the relationship between financial performance and size of deposit taking SACCOs in Kenya. The variables of the study included returns on assets (dependent variable) and total assets, deposits/savings and turnovers expressed as logarithm (independent variables). The study analyzed the relationship using a regression model. The study findings established that there was a strong and direct relationship between return on assets and deposits/savings while there was an inverse relationship between return on assets and the total assets as well as turnover as found out in the regression model.

With regard to the return on assets as at the inception year 2008 the return was 5.30% which increased to 7.43% in 2009, then to 10.05% in 2010 but reduced to 9.91 in 2011 and increasing again to 11.33% in 2012. The study findings however established that there was a slight decrease in ROA in the year 2011.

On total assets, the study found out that the total assets were increasing over the study period. In the inception year 2008, the total assets as expressed as natural log amounted to 9.384 after which they increased continuously to an all time high of 9.593 as at the year 2012. The study further revealed that savings/deposits in the SACCOs were increasing continuously over the study period. These deposits/savings, expressed as natural logarithm, stood at 9.323 billion at the onset of the study then increased to close at 9.466 in 2012. It can be observed that the level of deposits/savings increased increasingly over the study period. The study findings also revealed that the turnovers were increasing continuously over the period of study.

5.3 Conclusion

The study concludes that there is a very strong relationship between financial performance and size of SACCOS in Kenya. Return on assets are highly affected by deposits/savings but inversely related to the total assets as well as turnover. As the size of savings/deposit increases the return on assets also increases. This could be attributed to the fact that savings/deposits is a major source of funding for the SACCOSs .The savings from members provide funds for loans which earn interest for the SACCOSs. The interest from loans is a major source of revenue for the SACCOSs which increases the return on assets.

The study also concludes that returns on assets in SACCOSs were on increasing trend as well as total assets and turnover. Further the study concludes that there has been an increase in deposit/savings over the period of study across the SACCOSs.

5.4 Limitations of the Study

A limitation in this study was defined as any factor that was present and affected in one way or another process of completing this research work. Key among the limitation was lack of the complete secondary data required for the study. Financial statements for all the SACCOSs that were sampled for the study were not available. This forced the researcher to limit the study to 15 SACCOSs for a period of four years. SASRA came to effect in 2009; hence it was not possible to get complete data for all the SACCOSs for the period before SASRA came into operations.

Secondly, the study used secondary data obtained from audited financial statements of the SACCOSs. Financial statements are prepared from historical data and assumptions and estimates apply in generating the financial statements. Hence there is room for bias which could result in financial statements that do not reflect the correct financial position.

The study faced financial and times constrain to facilitate comprehensive data collection and analysis. The researcher required a substantial amount of money and time which was not readily available. More resources would be required to carry out the study on a larger sample and for a longer period of study.

5.5 Recommendations

This section consists of policy recommendation and suggestions for further study. The recommendations are drawn from the study findings.

5.5.1 Policy Recommendations

The study established that there was a strong relationship between financial performance and size of SACCOSs as measured by the three proxies; total assets, savings/deposits and

turnover. This is expressed in high value of adjusted R^2 . This study therefore recommends that management of SACCOSs take good care of assets as they play a big role in generating wealth for the SACCOSs hence positive financial performance.

The study recommends that SACCOSs corporate governance be improved to avoid misuse of assets because assets are sources of future revenues for all organizations. This will help protect SACCOSs' assets which are used to generate future revenue and at the same time help in the administration of SACCOSs activities.

The study established that savings/deposits played a key role in determining the financial performance of SACCOSs. This study therefore recommends that the management of SACCOSs should devise strategies of increasing savings/deposits. This could be achieved by recruiting more members into the SACCOSs. Members' contributions provide savings/deposit which are used to extend loans and at the same time members provide ready market for the loans. Loans constitute the highest percentage of the total assets in the SACCOSs and assets are used to generate future revenues.

The study also recommends that SACCOSs improve their credit management practices so as to ensure that those being advanced with loans repay them on time. This will protect the interests of the SACCOSs and promote members confidence.

5.5.2 Suggestions for Further Studies

This study recommends that future research be carried out on the influence of SASRA on the financial performance of deposit taking SACCOSs in Kenya. SASRA was inaugurated in 2009 and charged with the responsibility of licensing and supervising deposit taking SACCOSs in Kenya.

The study also recommends that future research be carried out using primary data instead of secondary data. Moreover the study suggests use of different source of data instead of the financial statements. The study recommends that future research be done covering a longer period of studies like seven years and with a bigger sample size.

The study further recommends that future research be done using different variables like net loan income to average net loan portfolio as a measure of return. While other measures of size like branch network are employed.

The study used multiple regression model, future studies could use different models like data envelopment analysis to measure the level of efficiency of in SACCOSs.

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APPENDICES

APPENDIX I: RETURN ON ASSETS

	Return on Assets			
	2009	2010	2011	2012
Chemelil	0.4%	0.4%	0.5%	0.9%
Kenversity	12.4%	10.9%	6.9%	4.7%
Kenya Bankers	4.4%	3.5%	0.7%	0.5%
Kenya Police	1.3%	1.3%	1.3%	1.3%
K-Unity SACCO	2.8%	2.3%	0.6%	0.2%
Mombasa Port	26.1%	35.5%	40.5%	51.4%
Mwalimu National	8.7%	6.5%	5.6%	5.2%
Narok Teachers	0.1%	0.1%	0.2%	0.1%
Ndege Chai	1.4%	10.9%	21.6%	17.4%
Nyeri Teachers	22.0%	54.3%	32.2%	47.4%
Stima	3.8%	3.3%	10.0%	10.2%
Ukulima	2.2%	2.2%	9.0%	8.8%
United Nations	7.2%	7.3%	7.0%	6.7%
Wareng Teachers	11.8%	11.8%	12.0%	14.1%
Chai	6.9%	0.5%	0.5%	1.0%

Source: (SASRA, 2012)

APPENDIX II: TOTAL ASSETS (EXPRESSED IN LOGARITHS)

SACCO NAME	2008	2009	2010	2011	2012
Afya	9.761	9.818	8.400	10.011	10.035
Bureti Tea Growers	8.396	8.385	8.591	8.526	8.518
Busia Teso Teachers	8.451	8.508	9.045	8.648	8.676
Chai	9.092	9.056	8.367	9.103	9.117
Chemelil	8.326	8.344	9.139	8.444	8.433
Chuna	9.083	9.109	9.514	9.187	9.151
Gusii Mwalimu	9.445	9.497	10.166	9.588	9.628
Harambee	10.078	10.093	9.439	10.202	10.228
Hazina	8.995	9.244	9.554	9.303	9.474
Imarisha Sacco	9.394	9.510	8.866	8.982	9.645
Kenversity	8.736	8.829	9.614	9.632	8.658
Kenya Bankers	9.573	9.621	9.808	9.896	9.686
Kenya Police	9.635	9.712	9.218	9.622	9.957
K-Unity Sacco	9.176	9.176	8.576	9.273	9.245
Marakwet Teachers	8.492	8.550	8.902	8.576	8.744
Mombasa Port	8.490	8.733	8.626	9.094	9.152
Mombasa Teachers	8.486	8.542	8.613	8.626	8.980
Mosacco	8.553	8.575	10.231	8.608	8.659
Mwalimu National	10.094	10.174	9.230	10.286	10.343
Nacico	9.189	9.205	8.880	9.370	9.374
Naku	8.406	8.511	8.554	8.954	9.062
Narok Teachers	8.534	8.554	9.150	8.662	8.685
Ndege Chai	9.040	9.078	9.385	9.159	9.208
Nyeri Teachers	9.208	9.255	9.798	9.407	9.465
Stima	9.663	9.710	9.663	9.887	9.973
Ukulima	9.587	9.628	9.668	9.706	9.790
United Nations	9.505	9.590	8.269	9.749	9.816
Vision Point Sacco	7.963	8.118	9.019	8.327	8.412
Wanandegge	8.905	8.984	8.817	9.081	9.081
Wareng Teachers	8.814	8.803	8.817	8.884	8.910
Average	9.384	9.437	9.484	9.545	9.593.

Source: (SASRA, 2012)

APPENDIX I11: DEPOSITS/SAVINGS (EXPRESSED IN LOGARITHS)

SACCO NAME	2008	2009	2010	2011	2012
Afya	9.706	9.738	9.746	9.853	9.918
Bureti Tea Growers	8.140	7.935	7.956	8.225	8.069
Busia Teso Teachers	8.381	8.436	8.507	8.560	8.555
Chai	8.960	8.929	8.944	8.977	9.017
Chemelil	7.595	8.121	8.137	8.203	8.181
Chuna	8.934	8.987	9.041	9.092	9.015
Gusii Mwalimu	9.273	9.313	9.361	9.461	9.504
Harambee	9.902	9.952	9.983	10.028	10.062
Hazina	8.725	9.608	9.022	9.239	9.401
Imarisha Sacco	9.260	9.360	9.384	8.900	9.453
Kenversity	8.673	8.728	8.785	9.573	8.450
Kenya Bankers	9.489	9.521	9.552	9.803	9.611
Kenya Police	9.541	9.635	9.718	9.381	9.875
K-Unity Sacco	9.077	9.077	9.126	9.183	9.145
Marakwet Teachers	8.446	8.507	8.525	8.541	8.629
Mombasa Port	8.380	8.507	8.649	8.790	8.878
Mombasa Teachers	8.313	8.344	8.362	8.447	8.889
Mosacco	7.682	8.342	8.405	8.343	8.297
Mwalimu National	10.030	10.083	10.130	10.188	10.222
Nacico	7.982	8.898	8.951	8.945	8.997
Naku	8.685	8.458	8.812	8.888	9.018
Narok Teachers	8.454	8.458	8.476	8.494	8.516
Ndege Chai	8.919	8.935	9.016	8.994	9.005
Nyeri Teachers	8.413	9.111	9.156	9.215	9.261
Stima	9.542	9.584	9.670	9.738	9.848
Ukulima	8.316	9.540	9.573	9.620	9.710
United Nations	8.207	9.518	9.600	9.674	9.730
Vision Point Sacco	7.737	7.927	8.130	8.185	8.237
Wanandegge	8.840	8.906	8.921	9.015	8.996
Wareng Teachers	8.692	8.701	8.702	8.732	8.768
Average	9.208	9.323	9.358	9.413	9.466

Source: (SASRA, 2012)

APPENDIX I V: TURNOVER

SACCO NAME	2008	2009	2010	2011	2012
AFYA	8.841	8.875	8.932	8.861	9.141
BURETI TEA GROWERS	7.551	7.556	7.601	7.689	7.743
BUSIA TESO TEACHERS	7.489	7.556	7.582	7.620	7.835
CHAI	8.110	8.130	8.116	8.180	8.232
CHEMELIL	7.611	7.491	7.633	7.605	7.543
CHUNA	7.987	8.038	8.059	8.033	8.290
GUSII MWALIMU	8.618	8.653	8.653	8.755	8.806
HARAMBEE	9.028	9.065	9.107	9.156	9.153
HAZINA	8.699	8.459	8.572	8.341	8.489
IMARISHA SACCO	8.429	8.563	8.646	8.004	8.814
KENVERSITY	7.570	7.915	7.947	8.568	8.115
KENYA BANKERS	8.541	8.533	8.568	8.918	8.611
KENYA POLICE	8.626	8.711	8.863	8.772	9.072
K-UNITY SACCO	8.517	8.517	8.693	8.508	8.107
MARAKWET TEACHERS	7.286	7.411	7.500	7.500	7.691
MOMBASA PORT	7.697	7.889	8.100	8.405	8.471
MOMBASA TEACHERS	7.598	7.600	7.707	7.832	7.885
MOSACCO	7.753	7.764	7.710	7.886	7.978
MWALIMU NATIONAL	9.126	9.204	9.360	9.336	9.481
NACICO	8.200	8.230	8.260	8.356	8.337

NAKU	8.169	7.750	7.742	7.903	8.158
NAROK TEACHERS	7.532	7.547	7.373	7.400	7.621
NDEGE CHAI	8.175	8.253	8.395	8.187	8.432
NYERI TEACHERS	8.361	8.388	8.454	8.522	8.579
STIMA	8.710	8.813	8.877	9.008	9.121
UKULIMA	8.664	8.728	8.745	8.771	8.858
UNITED NATIONS	8.638	8.683	8.788	8.890	8.983
VISION POINT SACCO	7.331	7.462	7.524	7.696	7.720
WANANDEGE	8.039	8.070	8.112	8.149	8.227
WARENG TEACHERS	7.886	7.899	7.928	8.010	8.137
Average	8.159	8.192	8.252	8.295	8.388

Source: (SASRA, 2012)

APPENDIX V: DATA COLLECTION SHEET

Table 1: Financial performance measures for the last five years

Year /performance measure	2008	2009	2010	2011	2012
Total revenue					
Net income					
Interest on members deposits					

Table: Measures of size for the last five years

Year /performance measure	2008	2009	2010	2011	2012
Total Assets					
Total deposits/Savings					
Total membership					

APPENDIX VI: LIST OF SACCOS

1. MWALIMU
2. HARAMBE
3. AFYA
4. STIMA
5. KENYA POLICE
6. UNITED NATIONS
7. UKULIMA
8. KENYA BANKERS
9. IMARISHA
10. GUSII MWALIMU
11. NDEGE CHAI
12. NYERI TEACHERS
13. K. UNITY FINANCE
14. CHAI
15. HAZINA
16. MOMBASA PORT
17. NACICO
18. NAKU
19. WANANDEGE
20. CHUNA
21. NAROK TEACHERS
22. MOSACCO
23. CHEMELIL
24. BURETI TEA GROWERS
25. MARAKWETI TEACHERS
26. VISION POINT
27. WARENG TEACHERS
28. BUTERE
29. MOMBASA TEACHERS
30. KENVERSITY