

**EFFECT OF FINANCIAL STABILITY ON THE PERFORMANCE OF
DEPOSIT TAKING SACCOs IN NAIROBI COUNTY**

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DECLARATION

STUDENT'S DECLARATION

I declare that this research project is my original work and has never been submitted for a degree in any other university or college for examination/academic purposes.

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SUPERVISOR'S DECLARATION

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I acknowledge the valuable support extended to me by the colleagues and staff of Nyerere Opala Associates, Management and development consultants in analyzing sets of audited financial statements of various deposit taking SACCOs in Nairobi County.

DEDICATION

This work is dedicated to the esteemed clients of Nyerere Opala Associates, Management and development consultants. I hope the vast majority of them will find it necessary to institutionalize the international best practices and prudential financial management standards established by SASRA and WOCCU.

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LIST OF ABBREVIATIONS

ACCOSCA	-	African Confederation of Cooperative Savings and Credit Associations
DTS	-	Deposit Taking Sacco
FOSA	-	Front Office Savings Activity
IMF	-	International Monetary Fund
KNFC	-	Kenya National Federation of Cooperatives
KUSCO	-	Kenya Union of Savings and Credit Organisation
MDIs	-	Micro Deposit Taking Institutions
OCDC	-	Overseas Cooperative Development Council
SACCOs	-	Saving and Credit Cooperative Organizations
SASRA	-	Sacco Societies Regulatory Authority
SPSS	-	Statistical Package for Social Sciences
WOCCU	-	World Council of Credit Unions
ROCE	-	Return on capital employed

ABSTRACT

The financial system plays a critical role in the economy. It enables the financial intermediation process which facilitates the flow of funds between savers and borrowers, thus ensuring that financial resources are allocated efficiently towards promoting economic growth and development. Financial stability describes the condition where the financial intermediation process functions smoothly and there is confidence in the operation of key financial institutions and markets within the economy. The set of financial soundness indicators developed by SASRA and WOCCU including liquidity, asset quality and capital adequacy are some of the main factors affecting the financial performance of a company. The study sought to establish the effect of financial stability on performance of deposit taking SACCOs in Nairobi County. The study used descriptive research design to examine the determinants of financial performance of Savings and Credit Co-operative Societies in Nairobi County. The population of this study comprised all the 34 DTS which have complied with SASRA regulations by December 2013. The study used secondary data from all the SACCOs sampled. The data was extracted from the audited financial statements for the year ended 31st December 2010 to 31st December 2013 and was considered sufficient for the study. The data collected was analyzed in order to determine the relationship between financial performance and financial stability. The coefficient of determination (R^2) was used to measure the extent to which the variation in financial performance is explained by the variations in its determinants. This analysis was done using SPSS software and the findings presented in form of a research report. From the regression model, the study found out that there were factors positively influence the financial performance of Deposit taking Saccos in Nairobi County, including liquidity, capital adequacy, size of the SACCO and management quality. They influenced it positively. The study found out that the intercept was 2.481 for all years. The four independent variables that were studied (liquidity, capital adequacy, size of the SACCO, management quality) explain a substantial 71.5% of financial performance of Deposit taking Saccos in Nairobi County as represented by adjusted R^2 (0.715). The study therefore concludes that financial stability positively and significantly influences the financial performance of deposit taking SACCOS in Nairobi County. The study recommends that all SACCOs should embrace the prudential financial management standards established by SASRA and WOCCU.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

A savings and credit society also known as a credit union is a cooperative financial institution that is owned and controlled by its members and operated for the purposes of promoting thrift, providing credit at low interest rates and providing other financial services to its members. World over, systems in these organizations vary from slightly to significantly in terms of total system assets, average institutions' asset price and regulatory control. This ranges from volunteer operations with a few members' organizations to institutions with several billions in asset values. For instance, according to a report by the World Council of Credit Unions, 2008, the average credit unions in the United States of America had USD 93million worth of assets in 2007 as against an average commercial bank average of USD 1.5 billion. The world council of credit unions (WOCCU) defines a credit union as a non-profit making cooperative institution (WOCCU, 2007). In real practice however legal provisions relating to these institutions vary by jurisdiction. For example in Canada credit unions are regulated as non-profit making institutions and view their mandate as that of earning a reasonable profit to enhance services to members to ensure stability. The same view was shared in Kenya up to the year 1997 when these institutions were liberalized by sessional paper NO 6. to be run as commercially viable institutions and their financial statements to be prepared using same Financial reporting benchmarks as other commercial entities within the financial sector (Maina, 2007).

These institutions have relatively unique structures in that agency problems exist given that the owners of the institutions and users of the services are the same people

as captured by one of their universal principles of "democratic member control". Savings and credit cooperative societies have a departure from other financial institutions a majority of whom are banks in that, the members who hold accounts in the SACCOS are at the same time the owners, and they conduct their voting mandate on the one member - one vote basis irrespective of the members' shareholding. This means that only the members of these institutions can deposit and borrow from them (Ombado, 2010).

In Kenya, Cooperative societies are recognized as those organizations that are registered under the Cooperative Societies Act (Cap 490), Laws of Kenya. From an operational perspective a cooperative society in Kenya is a voluntary association of persons who work together to promote their mutual economic interests. The main objective is to give support to the members. Nobody forms a cooperative society to earn a profit. Instead people come forward as a group, pool their individual resources, utilize them in the best manner possible and derive some common benefit out of it (Gachara, 2010). Depending on the part of the world one comes from cooperative societies are also called credit unions, rural banks or micro finance institutions. Some simply operate as not for profit organizations.

Savings mobilization should be backed by adequate institutional capital which ensures sustainability, provide cushion to absorb losses and impairment of members' savings (Evans, 2001). The institutional capital which comprises the core capital and less share capital is mainly accumulated from appropriation of the surpluses. Therefore, SACCOs should strive to maximize on the earnings to build the institutional capital (Branch & Cifuentes, 2001; Ombado, 2010). This institutional capital ensures the

permanence and growth of the SACCO seven in turbulent economic times (Evans, 2001). In fact, it helps the SACCOs to grow and, remain economically and financially viable (Gijssels & Devetere, 2007). Such growth is enhanced by effective financial practices.

Imperatively, each SACCO needs to generate income which is adequate to cover all its operational costs, enhance the institutional capital, dividends and rebates. In this regard, financial practice is based on sound financial stewardship, solid capital structure, and prudent funds allocation strategy (Maina, 2007).

1.1.1 Financial Stability

The financial system plays a critical role in the economy. It enables the financial intermediation process which facilitates the flow of funds between savers and borrowers, thus ensuring that financial resources are allocated efficiently towards promoting economic growth and development. Financial stability describes the condition where the financial intermediation process functions smoothly and there is confidence in the operation of key financial institutions and markets within the economy (Beck et al, 2000). Financial stability is defined as the smooth operation of the system of financial intermediation processes between households, firms and the government through a range of financial institutions supported by a myriad financial infrastructure (Kaloji, 2004).

Financial stability can be defined as “a condition in which the financial system – comprising financial intermediaries, markets and market infrastructure – is capable of withstanding shocks and the unraveling of financial imbalances, thereby mitigating

the likelihood of disruptions in the financial intermediation process which are severe enough to significantly impair the allocation of savings to profitable investment opportunities (Kimani, 2007). Given the imprecise nature of the broader view of financial system stability, most analysts concentrate on the risks and vulnerabilities of the financial system as these are relatively easy to understand and quantify.

According to Tilahun (2013), the financial stability of a company refers simply to whether it is doing well in business or not. A financial sustainability requirement of cutting costs to a minimum has led many programmes to seriously cut complementary services. The establishment of a reliable and regular income can create significant impacts. Financial system is a nerve centre of economic development across the globe. It provides intermediation services by bringing together savers and investors by channeling funds to investments that guarantee positive return.

Financial stability is not an end in itself but, like price stability, is generally regarded as an important precondition for sustainable economic growth and employment creation. Stability in the financial system would be reflected in an efficient regulatory infrastructure, efficient and well-developed financial markets and, efficient and sound financial institutions (Jansson, 1997).

Financial instability, on the other hand, could manifest through banking failures, extreme asset-price volatility, collapse of market liquidity and, in the end, a disruption in the payment and settlement system. Financial instability affects the real sector due to its links to the financial sector. It has the potential to cause significant macroeconomic costs by interfering with production, consumption and investment.

This ultimately defeats the national goals of broader economic growth and development (Gray et al, 2007).

For the DTS, financial stability refers to their ability to absorb financial shocks and continue with normal operation even in the face of a dynamic and challenging environment such as that brought by competition from other financial institutions. This is assessed by looking at their size, capital adequacy, liquidity and management quality.

1.1.2 Performance of Saccos

According to Armstrong (2006), performance is often defined simply in output terms- the achievement of quantified objectives. In this study financial performance was measured in terms of profitability. Financial performance is a subjective measure of how well an organization uses its resources and assets to generate revenues. Financial performance includes the “measurement, of the results of an organization’s policies and operations in monetary terms. The results are reflected in the organization’s returns, assets, value added. Otley (2009) asserts that accounting measures have been the mainstay of qualitative approaches to organizational performance measurement.

Financial performance is the results of a firm's policies and operations in monetary terms as evidenced by the results of many different activities undertaken by an organization. Common examples of financial performance indicators include operating income, earnings before interest and taxes, and net asset value (Combs et al., 2005). There are two major reasons as to why organizations should have financial performance measurement. The first one is to produce financial statements at the right time. Secondly, financial statements should be analyzed to produce information about

the performance of the organization, which must be used to improve that performance, (Johnson and Mark 1997).

There are varied measures of financial performance. In traditional management studies, financial ratios are classified according to the following performance aspects: liquidity, leverage, and financial performance (Richard et al., 2009). These ratios can be computed directly using financial statement information. Valuation ratios are added with the traditional classification of ratios, which incorporate more current assessments by the market of the company's "worth". Simple balance sheet and income statement items are used to compute ratios to analyze financial statements of the financial institutions. It is important to note that no one measure of financial performance should be taken on its own. Rather, a thorough assessment of a company's performance should take into account many different measures as there are several factors that determine the performance of SACCOs and other organization including asset base, leverage, performance of the loan book, corporate governance and the quality of staff and Regulations in the industry. The essence of financial performance measurement is to provide for the organization the maximum return on the capital employed in the business (Stiglitz, 2001).

Financial performance is any of many different measures to evaluate how well a company is using its resources to generate income (Combs et al., 2005; Richard et al., 2009). Common examples of financial performance include operating income, earnings before interest and taxes, and net asset value. It is important to note that no one measure of financial performance should be taken on its own. Rather, a thorough assessment of a company's performance should take into account many different

measures. . For the purposes of DTS financial performance we look at how well they use their available resources and assets to generate revenues. This is measured in terms of the Saccos returns, assets, value added. Financial ratios such as Return on asset (ROA), Return on capital employed (ROCE), Return on equity (ROE), and return on investment.

1.1.3 Financial stability and Performance of Saccos

The set of financial soundness indicators developed by the SASRA and WOCCU including liquidity, asset quality and capital adequacy are some of the main factors affecting the financial performance of a SACCO. Examples of such indicators, as are the monitoring variables used in Hawkins and Klau (2000), Nelson and Perli (2005) and Gray et al (2007) which focus on market pressures, external vulnerability and banking system vulnerability.

Many SACCOs that are bigger in size and capitalization benefit from economies of scale and are endowed with better skilled manpower. They are thus able to comply with the prudential financial management standards set by WOCCU. However lack of a compulsive regulatory regime has also opened doors for financial mismanagement in big SACCOs.

SASRA through the Sacco societies Act 2008 and the guidelines has customized some of the WOCCU standards and applies them to SACCOs with core capital of shs 10 million and above. Since the SASRA requirements are intended to enhance financial stability, performance and controls, there is need to investigate the rationale behind

this cut off of Kshs. 10 million with regard to size and capitalization as well as establish a link between size and financial performance of SACCOs in general.

This research considered using the financial institution variables which Ab-Rahim et al (2012) used in his study on determinants of financial performance in Malaysian banking which were capital, size and liquidity. Capital was measured as the ratio of equity to total assets. Size refers to the total assets of the SACCO and since other dependent variables under consideration are standardized by using total assets, then size was measured as logarithm of total assets.

1.1.4 Saccos in Nairobi County

A cooperative society is an autonomous association of persons united voluntarily to meet their common economic cultural needs and aspirations through a jointly owned and democratically controlled enterprise. The key idea behind a co-operative society is to pool the scarce resources, eliminate the middlemen and to achieve a common goal or interest (Ministry of Cooperative Development and Marketing, 2007). Cooperative Societies are good vehicles for assisting the people improve their socio-economic situation. They derive their strength and validity from member solidarity cooperation and concern for each other. The Co-operatives are anchored on a well established Cooperative philosophy based on seven principles formulated by the International Cooperative Alliance which include: voluntary and open membership, democratic member control, member economic participation, autonomy and independence, education, training and information, cooperation among co-operatives and finally concerned for the community (Hans, 2012).

SACCOs receive savings from members in form of periodic deposits, usually monthly, and from this created pool, they serve the credit needs of members through personal loans. Gachara (2010) observed that most SACCOs are found in urban areas and particularly common among the employed. He also noted that SACCOs are part of the financial system in Kenya and identified other participants in the sector as commercial banks, non-banking financial institutions, building societies and insurance companies.

The first Savings and credit Cooperatives in Kenya were started in the sixties and they have grown exponentially. The Government annual economic survey shows that as at December 2009 there were more than 2,400 active SACCOs with membership in excess of 1.5 million people. Share capital stood at Kshs. 65 billion while outstanding loans were Kshs. 59 billion. The structure of the cooperative movement in Kenya comprises of four tiers. These include the primary societies, secondary cooperatives, tertiary cooperatives and nationwide cooperatives. The Kenya National Federation of Cooperatives (KNFC) is the only apex society in the movement. It was formed with an objective of promoting, developing, guiding, assisting and upholding ideas of the cooperative and SACCO principles. KNFC is the link between cooperatives in Kenya and the international cooperative alliance. Of special mention here is the African Confederation of Cooperative Savings and Credit Associations (ACCOSCA), which is registered under the Societies Act, Chapter 108 of the laws of Kenya, (KUSSCO 2009).

Nairobi County has the highest number of industries and thus attracts a significant number of people seeking for employment. These employees require financial

services to cater for their developmental needs which can only be adequately met by Savings and Credit Co-operative Societies. The basic structure of SACCOs that differentiates them from other financial institutions is that they are user-owned financial intermediaries. Members typically have a common bond based on geographic area, employer, community, industry or other affiliations. It is on this basis that Nairobi County has the highest number of SACCOs. As at 31st December 2011, Nairobi County annual report indicated that there were 1,102 active SACCOs, with a total membership of 795,541, Share Capital amounting to Kshs. 11.78 billion while the member's savings/Deposits amounted to Kshs.110.57 billion. The SACCOs are distributed in three categories as follows: employee based 935, community based 92 and transport based 75 (Njeru, 2012).

Sacco societies in Nairobi County which were estimated at 1369 in 2010 accounted for over 50% of the total assets and deposits in the entire subsector. This is mainly because they are salary based Sacco, thus providing a stable source of deposits and market for lending. The same trend is replicated in the deposits and assets. (Co-operatives Star Times, 2010). These SACCOs comprise both deposit and non-deposit taking ones. In the current legal framework a Deposit Taking Sacco (DTS) is that Sacco operating a front office savings activity (FOSA). Sacco comprises 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 (SACCOs Review, 2012).

1.2 Research Problem

For companies, being able to meet short-term financial obligations is an integral part of maintaining operations and growing in the future. After all, if it's not able to meet today's debts, a company might not live to see another day. A stable and efficient financial system pools, transfers, and minimizes risks while at the same time increases liquidity and information sharing through the use of more sophisticated financial products and technology (Ahmed and Javad, 2009).

The Kenyan SACCO sector has been observed to contribute greatly to the total financial industry and consequently the economy. It contributes to over forty five percent of the nation's Gross Domestic Product. These deposit taking SACCOs are actually observed to be controlling more than 78% of the total deposits and assets of the SACCO industry, IMF (2011). Given the important role that SACCOs play in any economy, it is therefore crucial to understand financial performance and its determinants so that the management can be able to know how to improve financial performance and thus ensure sustainability of the Co-operative movement in Kenya. However, if the determinants of financial performance are not properly enhanced and protected through legislation and oversight then SACCOs will be unable to adequately advance loans to members. If this extends over long periods of time, the eventual result is liquidation.

As Mudibo (2005) posits, the objective of SACCO Societies is member empowerment through savings mobilization, disbursement of credit and ensuring SACCOs' long-term sustainability through prudent financial practice. However, there are a number of challenges in promoting quality financial management such as limited capital funding

sources, loan delinquency, and assessment and management of risks. Ademba (2010), postulates that SACCOs in Kenya are faced by such problems as; poor governance and, lack of members' confidence, among others, while Ndung'u (2010), adds that the SACCOs are inhibited by mismanagement and poor investment decisions. Earlier, Thabo, et al., (2003) noted that SACCO societies have problems generating wealth due to poor financial stewardship, under-capitalization, high cost of funds, and delayed member payments. Munyi (2006) says that such challenges would hinder the achievement of the set performance objectives.

The SACCO movement has for a long time performed below the members expectations thereby causing dissatisfaction among most of their members. Over time, SACCOs have been trying to address members' demands by mobilizing funds and granting credit. However, they have not been able to grow their wealth sufficiently through accumulation of enough institutional capital to achieve a reasonable level of non-withdrawable capital, fund assets, provide cushion to absorb losses and impairment of members' savings. However, previous studies (Asher, 2007; Ogsi, 2001) have shown that lack of Growth of SACCOs' Wealth has threatened their sustainability such that they have not been able to absorb their operational losses. This has led to the losses being absorbed by members' savings and share capital which leads to capital impairment.

Locally studies done on financial performance of Saccos include Kinuthia (2007) did a study on management of loan default problems and performance in SACCOs in Nairobi province, Gisemba (2010) undertook a study on the relationship between credit risk management practices and financial performance of SACCOs in Kenya,

Muriuki (2010) investigated the effects management variables on SACCO's performance in the TNT SACCO while Muriuki (2013) did a study on factors affecting Sacco performance in Meru South district a case of Tharaka Nithi Teachers Sacco. Though studies have been done on financial performance, most of them have concentrated in the banking sector and very few in other areas. Therefore there exists a research gap around the whole the issue of the effect of financial stability on performance of deposit taking Saccos in Nairobi County. This study will strive to respond to the following research questions: what is the effect of financial stability on performance of deposit taking Saccos in Nairobi County?

1.3 Research Objective

To establish the effect of financial stability on performance of deposit taking Saccos in Nairobi County.

1.3.1 Specific Objectives

The study specifically sought to:

- i. To determine the effect of capital adequacy on performance of deposit taking Saccos in Nairobi County
- ii. To establish the effect of liquidity on the performance of deposit taking Saccos in Nairobi County
- iii. To assess the effect of asset quality on performance of deposit taking Saccos in Nairobi County

1.4 Value of the Study

SACCOs have great potential in delivering goods and services to its members in circumstances which other sectors cannot manage. In the recent past, a number of

SACCOs have collapsed due to operating inefficiently leading to poor financial performance. It is therefore prudent for those in charge of the management of SACCOs to clearly understand the determinants of financial performance and how each variable relates with financial performance, whether positively or negatively. Consequently, the findings of this study shall be of great benefit to various parties as discussed below:

First is to the management committee that is charged with the responsibility of the day-to-day running of the SACCO. Understanding the determinants of financial performance will help them in coming up with the relevant policies and procedures as well as adjusting them appropriately in order to avoid the occurrence of financial under performance. Human Resource policy is a good example. Management is expected to hire competent employees who will improve the SACCOs productivity and hence financial performance.

The focus of this research is to establish whether there is need for mandatory application of the prudential international best practices in financial management of SACCOs in Kenya in order to guarantee consistently improved financial performance for the benefit of members and creditors. This would improve the long term viability of the SACCOs, thus having a positive impact on Kenya's microfinance sector and the economy generally. The information acquired from this study will be useful to policy-makers both in the government and SACCOs, especially in strengthening policy, legislative and prudential guidelines on how to improve the financial performance and effectiveness of SACCOs for the benefit of the members and stakeholders.

Other financial institutions shall benefit by understanding the determinants of financial performance of SACCOs. They can therefore come up with strategies to enhance those factors that are positively related to financial performance while treading carefully with those that are negatively related.

Government receives a great number of benefits and income from the SACCO sector through taxation as well as providing a source of employment opportunities to its citizens. The government shall be able to understand better the determinants of financial performance in SACCOs and therefore come up with proper legislation on finances that can ensure growth, sustainability and development of this sector.

Researchers will benefit since they can get a source of secondary data and contribute to academic literature in the field of financial performance that they can use for further studies. The determinants of financial performance in other sectors of the economy can be studied which may be similar to the SACCO sector. Relevant policies can as well be developed with the proper understanding of such determinants.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter summarizes selected information from other researchers who have done some work in this field of study. The specific areas covered are the theoretical review, effect of financial stability on performance, empirical studies and summary of literature review.

2.2 Theoretical Review

Different theories have been found to give clear explanation on the occurrence of financial performance. Some of the theories include financial stewardship theory, neoclassical theory of optimal capital accumulation, agency theory and shareholder's theory as explained here below.

2.2.1 Financial Stewardship Theory

The financial stewardship theory set the SACCOs' objectives as value maximization which is complemented by the SACCOs' vision. Key among these theories is the stakeholder theory which says that corporate decisions should consider the interest of shareholders (Sundaram&Inkpen,2004). However, the theory is not a legitimate contender of value maximization (Jensen, 2001). Another theory, virtue ethical theory of corporate governance states that SACCOs' agents and shareholders should conduct themselves appropriately. The theory suggests an ethical approach towards economic situations such as when there is less wealth or when there is competition.

The theory involves effectiveness and intellectual aspects of the steward and virtues that can be instilled with education. This theory is very useful to this study in that it helps to relate staff ability to growth in SACCOs' wealth. Agency theory on the other hand reduces the SACCO Society to two participants namely steward, and the shareholders. According to the theory, shareholders expect the stewards to act and make financial decisions in the best interest of the shareholders with the aim of maximizing shareholders value. This theory provides a separation of ownership and control (Bhimani, 2008).

In the Stewardship Theory, stewards protect and make profits for the shareholders and they are satisfied and motivated when the SACCOs' objective is attained. It stresses that the executive management are stewards who ensure they operate the SACCO Society to maximize financial performance as well as shareholders' profits. Donaldson & Davis (2002) contend that this theory appreciates the importance of structure which empowers the agents and it allows for the stewards' autonomy built on trust.

2.2.2 Neoclassical Theory of Optimal Capital Accumulation

According to neoclassical growth theory by Harrod and Robert (1987) savings are not an end in them. However, they play an important role in sustaining growth and development. Through savings, there will be capital accumulation leading to investments hence economic growth and ultimately development. Coupled with the above, a high saving economy accumulates assets faster, and thus grows faster, than does a low saving economy. However, in developing countries like Kenya, the theory can be used to improve the current situation of low levels of savings owing to poor

underdeveloped stock markets, dominance of urban based commercial banks, Micro Deposit Taking Institutions and semi regulated Micro finance institutions in the financial markets as vehicles for savings. Hence Savings and Credit Cooperative Societies (SACCOs) are intended to offer an alternative to improve the above undesirable situation in low income countries.

2.2.3 Agency Theory

Agency theory is developed as framework for analyzing conflicting interests between key stakeholders, in addition to the development of mechanisms for resolving conflicts (Tipuric, 2008). Besides prevalent contribution within discipline of corporate governance, agency theory application is extensive: agency theory may be applied in every situation in which one party (the principal) delegates work to another (the agent), who performs that work. Agency theory attempts to describe the relationship in terms of behavioral characteristics. Incentive for agency theory development is the relationship between ownership and control functions within large corporations. Pioneers, Jensen and Meckling, tried to verify that corporations do not operate according to the maximization principle, mainly because of the conflicting interests of major governing parties. Agency theory describes economic exchange relations between principal and agent. The Principal-agent relation, in which principal delegates work to the agent, is described using the metaphor of a contract (Jensen & Meckling, 1976). The objective of this theory is to determine optimal contract between principal and agent.

According to Abdullah & Valentine (2009), agency theory explains the relationship between the principals, such as members and agents. In this theory, members who are the owners or principals of the Sacco, hires by electing the management board as their agent. Principals (members) delegate the running of business to the management board which in turn hire and delegate authority to the managers. Indeed, Daily et al. (2003) note that two factors can influence the prominence of agency theory. First, the theory conceptually reduces the corporation to two participants of managers and the owners. Second, agency theory suggests that employees or managers in Saccos' can be self-interested. Shareholders expect the agents to act and make decisions in the principal's interest. On the contrary, the agent may not necessarily make decisions in the best interests of the principals.

In agency theory, the agent may succumb to self-interest, opportunistic behavior and falling short of the interest of the principal in favour of the agent's pursuits. Notwithstanding such setbacks, agency theory was introduced basically as a separation of ownership and control (Bhimani,2008). Indeed, agency theory can be employed to explore the relationship between the ownership and management structure. However, where there is a separation, the agency model can be applied to align the goals of the management with those of the owners. The model of an employee portrayed in the agency theory is more of a self-interested, individualistic and are bounded rationality where rewards and punishments seem to take priority. This theory prescribes that employees must constitute a good governance structure since they are held accountable in their tasks and responsibilities. This theory helps the researcher identify and describe the parties in DTS. The agency costs that a Saccos incurs also affect financial performance of DTS.

As with agency theory, basic finance theory is concerned with ensuring that managers act to maximize shareholders' wealth. The theory is an efficient market model which actually recognizes the agency costs. The myopic market model shares a common view with the agency theory where the firm should serve shareholders' interests only. According to the model, short-term performance is encouraged thereby sacrificing long-term value and competitive capacity of the SACCO society. According to the model, earnings can provide a clue as to the firms value. This model argues out that maximization of shareholder welfare does mean share price maximization. This is owing to the fact that the market system tends to undervalue long-term expenditures which may lead to the increase of the share holder welfare. Owing to myopic approaches in the governance structure, the agents are forced to take short-term decisions in increasing share prices (Keasey et al., 2004).

2.2.4 Shareholder's Theory

The origin of the ideas shaping shareholder theory is more than 200 years old, with roots in Smith (1776) "The Wealth of Nations". In general, shareholder theory encompasses the idea that the main purpose of business lies in generating profit and increasing shareholders wealth. Modern proponents of shareholder theory espouse three tenets from Smith, namely the importance of "free" markets; the "invisible hand of self-regulation;" and the importance of "enlightened self-interest." Shareholder theorists call for limited government and regulatory intervention in business, believing markets are best regulated through the mechanism of the invisible hand—that is, if all firms work in their own self interest by attempting to maximize profits, society at large will benefit (Cunliffe and Luhman, 2013).

Some proponents of the shareholder view even believe that the invisible hand checks illegal activity, arguing that the market will punish, or weed out, firms that engage in illegal or unethical behavior. Therefore, they conclude that, in general, excessive oversight and regulation of industry is unnecessary. According to Friedman (1962), shareholders' theory defines the primary duty of a firm's managers as the maximization of shareholder wealth. The theory enjoys widespread support in the academic finance community and is a fundamental building block of corporate financial theory. However, the shareholder model has been criticized for encouraging short-term managerial thinking and condoning unethical behavior. According to Smith (2003) most critics believe shareholder theory is geared toward short-term profit maximization at the expense of the long run. On the other hand, Freeman et.al (2004), asserts that shareholder theory involves using the prima facie rights claims of one group of shareholders to excuse violating the rights of others.

Many proponents of shareholder theory, in a stylized version of the model, exhort managers to maximize the firm's current stock price (Lasher 2008). By focusing on the current stock price which can be manipulated in the short-term by unscrupulous managers. This theory helps the researcher articulate the importance of shareholders, management and Board of Directors taking the fore-front and ensuring that the going concern of the Sacco is considered and that the interests of all the stakeholders are taken catered for.

2.3 Determinants of Saccos Performance

This section focuses on how the various determinants of the Sacco financial stability performance such as such as capital adequacy/capitalization, liquidity and asset quality/size.

2.3.1 Capital Adequacy

Capital adequacy refers to a relative measure: it establishes the maximum level of leverage that a financial institution is allowed to reach on its operations (Jansson, 1997). It is measured by the ratio of risk-weighted assets relative to regulatory equity, which has been internationally recommended to be equal to 12.5 times, or commonly known as a capital adequacy ratio of 8% (Jansson, 1997). Nonetheless, it has to be remembered that this prudential standard proposed by the Basel Committee was intended to be applied to international and large banking institutions from developed countries, and that it has been translated to several financial systems in developing countries despite the well-known differences in institutional risk profile, scale of operations and national economic environments (Guidotti et al, 2004).

The prudential standards in Ghana specify minimum capitalization requirements for licensed MFI and rural banks. There are indications that a significant number of MFIs and rural SACCOs have capital adequacy deficiencies largely because of unfavorable operating guidelines, rapid growth in loan portfolios and inadequate provisions for bad loans (Anupam, 2012). This indicates sound capital of the Sacco relative to the potential risk. The aim is to protect members' deposits. The Capital adequacy is measured in terms of the absolute minimum as prescribed in the regulations. The minimum core capital currently prescribed by SASRA regulations is Kshs

10million.Amer et al (2011) suggested that the performance is positively and significantly affected by the asset quality, capital adequacy, credit risk and liquidity of banks. The findings however contradict those by Ab-Rahim et al. (2012) who found a negative relationship between capitalization, asset quality and Management quality with various measures of financial performance.

2.3.2 Liquidity

Effective liquidity management is important for the SACCO to be able to meet share and savings withdrawals, external borrowing repayments, member loan demand and operating expenses. A key factor determining a company's or SACCOs short-term financial health is liquidity, the definition of which depends on context. In stock trading, liquidity is the degree to which the market is willing to buy a particular stock. As a characteristic of an asset, liquidity refers to the ease with which an asset can be converted into cash (Anupam, 2012). This is an accounting ratio which measures the ability to pay short term liabilities as and when they fall due. In the cooperative movement under the new rules for deposit taking SACCOs this is one of the major ratios that SACCOs need to adhere to. no wonder such SACCOs are obligated to maintain at least not less than 15% of total assets in liquid form. In order to achieve this deposit taking SACCOs are required not to declare dividends or to reduce amount of dividends to be paid if they have to achieve these ratios.

The licensing authority prescribes the reserves that licensed deposit taking institutions including credit unions and rural banks are required to hold relative to an institution deposit liabilities (Beck et al, 2000). The licensing authority classifies the performance of rural banks into a number of categories e.g. satisfactory, mediocre and

distressed which could form a basis for a system of rewards and penalties for unacceptable performance. Liquidity is measured in terms of the ratio of liquid assets to deposits and short term liabilities. The minimum statutory ratio of 15% is required to be maintained. The external borrowing also forms part of the indicator of the liquidity status of the Sacco. This has been capped at 25% of the total assets.

Abdul (1993) in his empirical study to identify parameters which are important in the determination of financial performance by publicly quoted companies also found out that liquidity positively influences a company's financial performance. According to Ahmed and Javad (2009) in their study they concluded that firms which are more liquid are likely to realize better financial performance than firms with liquidity problems hence liquidity is an important determinant of financial performance, on the other hand Anupam (2012) in his study states that firm liquidity is not significant in influencing firm performance.

2.3.3 Size of the Sacco

It is generally assumed that larger firms which are likely to be more financially stable will record consistently better financial performance compared to small firms. SACCOs which are more mature and have done a lot of investments will generally declare higher dividends without much struggle compared to SACCOs that have are at early stages of the corporate lifecycle. Therefore SACCO size is an important determinant of financial performance.

Sinani et al. (2007) found that firm size and higher labour quality display higher levels of financial performance. The findings however contradict earlier findings by Badunenko & Stephan (2004) who indicated that research and development expenditure, sales growth, capital intensity, proportion of East German firms and size of the firm do not have influence on technical financial performance. Holder et al. (1998) revealed that larger firms have better access to capital markets and find it easier to raise funds at lower costs, allowing them to pay higher financial performance to shareholders.

2.4 Empirical Review

Beck et al (2000) examined the causal impact of financial stability and development on growth and its sources where they found that there was a significantly positive causal impact of financial development on real per capita growth and productivity per capita growth. The study then recommended that positive repercussions for long-run economic growth improve resource allocation and accelerate productivity growth. In the year 2001, Davies conducted a study to review the contemporary debate on governance within the co-operative sector and make an analysis of the traditional approach taken by the movement. This study found that professional management was inevitably gaining ground against lay directors. The study then recommended that when people identify with co-operative purpose and values, they would want to be involved. Good governance in co-operatives was more a problem of management culture. Beck et al., (2000) study emphasized on growth of sources but lacked to indicate how these sources impact on the growth of wealth.

Kaloi (2004) in another study found that delays in remittance; loan default; low monthly earnings and failure to invest in illiquid investments led to losses hence no growth of wealth. The study recommended that Ministry of Co-operative Development and Marketing should introduce sound remittance policies. In the study by Mbaabu (2004), it was found that poor management of business; delays in approval; project under financing; and lending not based on security, among others, affected growth of wealth. The study recommended that there was need for; information system implementation; segmentation of non-performing loans and reassignment of loans to respective risk departments; and quality appraisal of applicants. The main concern of this study by Mbaabu (2004) was on loan delinquency. The study, therefore, failed to identify other factors that lead to growth of wealth. It never said what led to growth of wealth.

Adeyemo and Bamire (2005) in their study found that unavailability and inadequacy of credit was a major problem; loan repayment and amount of money borrowed were significant variables that influenced saving patterns; and fund borrowed significantly influenced investment patterns. This led to their making recommendation that saving and investment level could be enhanced if loans were adequately made available and proper supervision and monitoring of funds were put in place. The study by Adeyemo and Bamire (2005) identified lack of funds and poor stewardship as the major challenge to growth of wealth.

Nair and Kloeppinger-Todd's (2007) study shows that sustainability of SACCOs was related to the stewardship and legal framework. The study did not explain how growth of wealth would be achieved through the three main determinants; financial stewardship, capital structure and funds allocation strategy.

The study by World Bank (2007) found that failure came where financial cooperative systems were unsustainable, subject to political influence or used by governments for their own purposes. This then led to recommendation that for financial co-operatives to be sustainable, governments needed to provide an enabling environment, not exercise excessive control that restricts growth and consolidation, and not use them as channels to provide subsidized credit. Integration enabled improved governance and the ability to provide a wide range of services. According to the World Bank (2007), growth and sustainability of SACCOs was related to not only the stewardship and legal framework but also to capital structure and funds allocation strategy. Overseas Cooperative Development Council, Arlington (OCDC) (2007) in their study found out that success factors for SACCOs were; more clarified legal framework; an economy that permitted all types of competitive businesses; membership that is open to users; high equity/debt ratio; Member-centered services; board of directors elected by and from members only; organization around a resource base and service sufficient to sustain the co-operative as a viable business; Professional management; access to markets; accountability of all employees to the co-operative; management training; membership education; and willingness to use modern technology. It recommended that success of co-operatives would be by; creating an enabling legal and regulatory environment, accessing markets (Local, Regional and Global), moving from government to member control, and emerging from dependency. The study by OCDC

(2007) touched very lightly on the two determinants, stewardship and capital structure and to show how funds allocation strategy would contribute to success.

In another study by Kimani (2007), it was found that the main causes of financial under performance and ineffectiveness in credit administration were unqualified staff in SACCOs; inadequate funds to lend; inadequate training; lack of effective technology; weak internal control systems; and that credit management committee is very powerful and able to manipulate the lending. The study recommends that the SACCOs should, therefore, increase the funds for lending through external borrowing; employ competent staff; restructure the organizational structure; funds should be allocated to investment with high returns; diversify the loan products to satisfy members; embrace teamwork; adopt modern technology; charge interest rates that attract members; ensure competition with other financial institutions; ensure networking with other SACCOs; provide education and training to members and staff; change location of office; participate in corporate social responsibility. The study established that growth and sustainability of SACCOs was related to the stewardship and legal framework.

In another study, Ochoki, (2007) found that there was lack of laws to govern FOSA; lack of qualified FOSA staff; lack of planning and inadequate capital in SACCOs which affected growth. Accordingly, SACCOs should ensure sound business practices and consider safety and liquidity.

Muriuki (2013) did a study on factors affecting Sacco performance in Meru South district: in the particular case of Tharaka Nithi Teachers Sacco. The broad objective of the study was to investigate the effects management variables on SACCO's performance in the TNT SACCO. The results show that governance has enormous effects on the financial performance of the SACCO. Further, the results also indicate that the aspects of education and training play a major role on influencing governance structures. The researcher recommends that the SACCO diversifies its products to take into account the needs of the members and the available market as a means for resource mobilization.

2.5 Summary of Literature Review

From the above literature, it can be concluded that when a SACCO is financially stable, it will consistently improve its financial performance. Different aspects of financial stability have been found to explain financial performance levels of firms and some are positively while others are negatively related to financial performance. SACCOs therefore need to understand the effect of each variable so that they can find ways of enhancing those that are positively related while mitigating those that are negatively related in order to improve their financial performance and the overall financial performance. Most of the studies reviewed in the literature are done in other countries whose strategic approach and financial footing is different from that of Kenya. Most of them also focus on other financial institutions other than the Saccos. There is therefore a literature gap on the relationship between financial stability and performance of Saccos in developing countries. This study therefore sought to fill this gap by focusing on the effect of financial stability on performance of deposit taking Saccos in Nairobi County.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides the methods that were used to address the objectives and the research problem. It also provides the research design, the target population, sample and sampling techniques, data collection techniques and procedures, and finally data analysis techniques.

3.2 Research Design

The study used descriptive research design to examine the determinants of financial performance of Savings and Credit Co-operative Societies in Nairobi County. According to Cooper & Schindler (2001), a descriptive study is structured with clearly stated investigative objectives. The design allows the researcher to make a speculation on the basis of the literature and any other earlier evidence as to what to expect the findings of the research to be. The analysis of the data collected can then support or disprove the research proposition.

3.3 Population

According to Mugenda (2003), a population is a group of individuals, events, or objects having common observable characteristic. Sim & Wright (2000) defines population as the collection of cases in which the researcher is ultimately interested, and to which he or she wishes to make generalization. The population of this study comprised of all the 34 DTS in Nairobi that have complied with SASRA regulations by December 2013 (appendix I). Therefore, the study took a census approach since the population is not big.

3.4 Data Collection

The study used secondary data from all the SACCOs sampled. The data was extracted from the audited financial statements for the year ended 31st December 2010 to 31st December 2013 and was considered sufficient for the study. These included Statement of comprehensive income and Statement of financial position. The source of the statements was from the audited reports which are filed with the office of the Nairobi County Co-operative Commissioner. The study was facilitated by use of secondary data that was extracted from published financial reports of SACCO's, articles and papers relating to effects of SASRA regulations on financial performance of Saccos in Nairobi County.

3.5 Data Analysis

Various factors determine the SACCOs financial performance. The data collected was analyzed in order to determine the relationship between financial performance and financial stability. Financial performance was the dependent variable while the financial stability was the independent variables.

3.5.1 Analytical Model

The following simple regression equation model was used:

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

Where Y = Financial performance

X_1 = Size

X_2 = Capital adequacy

X_3 = Liquidity

X_4 = Management quality

β_0 = Constant, the value of Y when the value of X is zero.

β_i (i= 1, 2, 3, 4) = Coefficients of determination of financial performance.

ε = Error term

Table 3.1: Operation definition of variable

Variables	Definition	Measurement
Y	Financial performance	Financial performance; was measured using the ROCE ratio, this was used as the measure of capital employed as a ratio of net income
X ₁	X ₁ is the Size	Size, this was measured using the Logarithm of total assets
X ₂	X ₂ is the Capital adequacy	Capital adequacy, this was measured by the ratio of Equity to total assets
X ₃	X ₃ is the Liquidity	Liquidity, this was measured by Ratio of SACCOs cash accounts assets (liquidity indicator)).
X ₄	X ₄ is the Management quality	Management quality was measured as the ratio of Non-interest expense to total asset.

Source: Researcher

3.5.2 Test of Significance

The coefficient of determination (R^2) was used to measure the extent to which the variation in financial performance is explained by the variations in its determinants. F-statistic was also computed at 95% confidence level to test whether there is any significant relationship between financial performance and financial stability. This analysis was done using SPSS software and the findings presented in form of a research report.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the information processed from the data collected during the study on the effect of financial stability on performance of deposit taking Saccos in Nairobi County. The sample composed of 34 SACCOs from Nairobi County registered as at 31st December, 2013.

4.2 Descriptive Statistics

Table 4.1: Summary of the Variables for the Savings and Credit Cooperative Societies

	2009	2010	2011	2012	2013	Average
Total Assets	1,678,445,502	2,201,016,019	3,036,524,006	3,769,939,570	3,904,890,449	2,918,163,109
Net income	49,062,662	40,785,520	42,811,961	45,278,069	51,260,172	45,839,677
Equity	7583066413	1369245430	391229703.6	454737457.9	553956901.7	2,070,447,181
Non interest expenses	3935912.147	13504646.5	726369.4706	12364096.01	13096787.41	8,725,562
Liquidity	0.392338235	0.434017647	0.539801059	0.602848471	0.676579882	0.529117
Capital expenditure	87775829.98	108621027.7	133398868.5	133398868.5	221817012.1	137,002,321
ROCE	0.11789943	0.068346353	0.015851197	0.073400869	0.041551249	0.06341
Management Quality	0.136999987	0.008168896	0.001362381	0.006887684	0.007545101	0.03219
Size	8.844201502	9.027962617	9.149927367	9.257077834	9.280362328	9.11191

Source: Research findings

Table 4.1 shows the factors affecting financial performance of Savings and Credit Cooperative Societies for the five years as measured by the Variables. From the findings, total assets had an average of 2,918,163,109, net income had an average of 45,839,677, equity had an average of 2,070,447,181, non-interest expenses had an average of 8,725,562, liquidity had average had an average of 0.529117, size had an average of 9.11191. In addition, ROCE and management quality had an average of

0.06341 and 0.03219 respectively with the highest value being recorded in 2009 for both at 0.11789943 and 0.136999987 respectively.

4.3 Results of Inferential Statistical Analysis

4.3.1 Regression Results

The study conducted a cross-sectional multiple regression on effect of financial stability on performance of deposit taking Saccos in Nairobi County over a period of five years (2009-2013). Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (Financial performance of Deposit taking Saccos in Nairobi County) that is explained by all the four independent variables (Liquidity, Capital adequacy, Size of the SACCO, Management quality).

Table 4.2: Results of multiple regression between financial performance of Deposit taking Saccos in Nairobi County and predictor variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.868	0.754	0.715	1.976

a. Predictors: (Constant), Liquidity, Capital adequacy, Size of the SACCO, Management quality

Source: Research findings

The four independent variables that were studied, explain only 71.5% of the financial performance of Deposit taking Saccos in Nairobi County as represented by the

adjusted R^2 . This therefore means the four variables contribute to 71.5% of the financial performance of Deposit taking Saccos in Nairobi County, while other factors not studied in this research contributes 28.5% of the financial performance of Deposit taking Saccos in Nairobi County. Therefore, further research should be conducted to investigate the other (28.5%) factors influencing the financial performance of Deposit taking Saccos in Nairobi County.

Table 4.3: Summary of ANOVA Results

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	430.361	4	86.072	19.599	0.006
Residual	140.533	29	4.392		
Total	570.894	33			

Source: Research findings

From the ANOVA statistics in table 4.3, the processed data, which are the population parameters, had a significance level of 0.0.006 which shows that the data is ideal for making a conclusion on the population's parameter. The F calculated at 5% Level of significance was 19.599. Since F calculated is greater than the F critical (value = 2.70), this shows that the overall model was significant i.e. there is a significant relationship between financial performance and its determinants.

Table 4.4: Regression coefficients of the relationship between financial performance of Deposit taking Saccos in Nairobi County and predictor variables

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.481	1.423		5.468	5.09E-06
Liquidity	0.583	0.161	0.483	4.242	1.77E-04
Capital adequacy	0.771	0.171	0.574	4.509	8.23E-05
Size of the Sacco	0.796	0.131	0.319	3.023	4.90E-03
Management quality	0.617	0.011	0.136	1.545	3.02 E-04

Dependent variable: Financial performance

Source: Research findings

The coefficient of regression in table 4.4 above was used in coming up with the model below:

$$FP = 2.481 + 0.583L + 0.771CA + 0.796SS + 0.617MQ$$

Where FP is financial performance, L is Liquidity, CA is Capital adequacy, SS is Size of the SACCO and MQ is management quality. According to the model, all the variables were significant as their significance value was less than 0.05. All the variables (liquidity, capital adequacy, size of the SACCO and management quality) were positively correlated with financial performance of Deposit taking Saccos in Nairobi County. From the model, taking all factors (liquidity, capital adequacy, size of the SACCO, management quality) constant at zero, financial performance of Deposit taking Saccos in Nairobi County was 2.481.

The data findings analyzed also shows that taking all other explanatory variables at zero, a unit increase in liquidity will lead to a 0.583 increase in financial performance of the of Deposit taking Saccos in Nairobi County; unit increase in capital adequacy will lead to a 0.771 increase in financial performance of Deposit taking Saccos in Nairobi County; a unit increase in size of the SACCO will lead to a 0.796 increase in financial performance of Deposit taking Saccos in Nairobi County while a unit increase in management quality will lead to a 0.617 increase in financial performance of Deposit taking Saccos in Nairobi County

This infers that size of the SACCO contributed most to the financial performance of Deposit taking Saccos in Nairobi County followed by capital adequacy then management quality while liquidity had the least effect.

4.3.2 Multicollinearity test

A situation in which there is a high degree of association between independent variables is said to be a problem of multicollinearity. Multicollinearity can also be solved by deleting one of the highly correlated variables. Heteroscedasticity means that previous error terms are influencing other error terms and this violates the statistical assumption that the error terms have a constant variance.

Table 4.5: Summary of Collinearity Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1	Profitability	0.787	2.2428
	Liquidity	0.733	2.4045
	Capital adequacy	0.669	2.5578
	Size of the Sacco	0.726	2.4297
	Management quality	0.764	2.3079

Source: Research findings

The Variance inflation factor (VIF) was checked in all the analysis and it ranged from above 1 to 4 which is not a cause of concern according to Myers (1990) who indicated that a VIF greater than 10 is a cause of concern.

4.3.3 Normality test

Normality of the variables was examined using the skewness and kurtosis tests. According to Kline (2011), the univariate normality of variables can be assumed if the skewness statistic is within the interval (-3.0, 3.0) and the kurtosis statistic lying in the interval (-10.0, 10.0).

Table 4.6: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Profitability	1.917	33	0.022	1.665	33	0.006
Liquidity	2.649	33	0.041	1.42	33	0.041
Capital adequacy	2.56	33	0.032	1.071	33	0.027
Size of the Sacco	1.873	33	0.038	1.333	33	0.024
Management quality	1.975	33	0.005	1.6	33	0.015

Source: Research findings

From the finding on the Kolmogorov-Smirnov and Shapiro-Wilk test on normality, the study found that significance in both tests were less than 0.05 which leads to the rejection of the null hypothesis that that data on liquidity, capital adequacy, size of the SACCO and management quality were not normally distributed. This is an indication that data on the variables was normally distributed.

4.4 Interpretation of the Findings

From the above regression model, the study found out that there were factors influencing the financial performance of Deposit taking Saccos in Nairobi County, which are liquidity, capital adequacy, size of the SACCO and management quality. They influenced it positively. The study found out that the intercept was 2.481 for all years.

The four independent variables that were studied (liquidity, capital adequacy, size of the SACCO, management quality) explain a substantial 71.5% of financial performance of Deposit taking Saccos in Nairobi County as represented by adjusted

R^2 (0.715). This therefore means that the four independent variables contributes 71.5% of the financial performance of Deposit taking Saccos in Nairobi County while other factors and random variations not studied in this research contributes a measly 28.5% of the financial performance of Deposit taking Saccos in Nairobi County.

The study also found out that liquidity is positively influenced by the financial performance of Deposit taking Saccos in Nairobi County with a coefficient of 0.583.. According to Ahmed and Javad (2009) firms which are more liquid are likely to perform better than firms with liquidity problems hence liquidity is an important determinant of financial performance, on the other hand Anupam (2012) in his study states that firm liquidity is not significant in financial performance.

The study found out that the coefficient for capital adequacy was 0.771, which was strong, positive and significant. This means that capital adequacy positively influenced the financial performance of SACCOs. This is consistent with Amer et al. (2011) who suggested that the financial performance is positively and significantly affected by the asset quality, capital adequacy, credit risk and liquidity of banks. The findings however contradict those by Ab-Rahim et al. (2012) who found a negative relationship between capitalization, asset quality and management quality with various measures of financial performance.

The study found out that the coefficient for size of the SACCO was 0.796, meaning that size positively and significantly influenced the financial performance of Deposit taking Saccos in Nairobi County. This is in line with Sinani et al. (2007) who found that firm size and higher labour quality display higher levels of financial performance,

while soft budget constraints adversely affect financial performance. The findings however contradict earlier findings by Badunenko & Stephan (2004) who indicated that research and development expenditure, sales growth, capital intensity, proportion of East German firms and size of the firm do not have influence on financial performance.

Holder et al. (1998) revealed that larger firms have better access to capital markets and find it easier to raise funds at lower costs, allowing them to pay higher financial performance to shareholders. This therefore means there is a positive relationship between financial performance and firm size.

The study also deduced that management quality positively influenced financial performance of Deposit taking Saccos in Nairobi County as it had positive coefficient (0.617). The result was consistent with prior research by Oteng-Abayie (2011) who found out that the source of the high variation of financial performance across the group of MFIs in Ghana was due to variation in management practices and technical capacities i.e., the product designs, portfolio quality, effectiveness of the marketing strategies, the degree of commitment towards clients and staff, the level of experience of MFIs, the effectiveness of training programs as well as the productivity of workers are all important factors that account for these variations.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary, conclusion and recommendations emanating from the main findings on the effect of financial stability on performance of deposit taking Saccos in Nairobi County.

5.2 Summary

The study sought to establish the effect of financial stability on performance of deposit taking Saccos in Nairobi County using descriptive research design to examine the determinants of financial performance of the 34 SASRA compliant Savings and Credit Co-operative Societies in Nairobi County. Based on the findings the study therefore concludes that financial stability positively and significantly influences the financial performance of deposit taking SACCOS in Nairobi County.

5.3 Conclusion

Based on the study findings and discussion, the study concluded that liquidity, capital adequacy, size of the SACCO and management quality influences the financial performance of Deposit taking Saccos in Nairobi County.

The study concludes that size of the SACCO positively and significantly influenced the financial performance of Deposit taking Saccos in Nairobi County as larger SACCOS are able to spread the fixed costs of providing basic financial services to more customers leading to lower average costs. The study also concludes that size of the Sacco also determines its financial performance.

The study also concludes that management quality as depicted in degree of commitment towards clients and staff, effectiveness of the marketing strategies, the level of experience and effectiveness of training programs positively and significantly influenced financial performance of Deposit taking Saccos in Nairobi County.

5.4 Recommendations for Policy

The study recommends that all SACCOs in Nairobi County should be subjected to the prudential standards and guidelines set by SASRA and WOCCU in order to protect member's funds thus ensuring long term sustainability. It is also recommended that all SACCOs should embrace the concept of credit risk management practices. This will help them to be able to lower the risks associated with credit in the SACCOs. The study also recommends that for efficient and effective credit risk management systems, credit policy in the SACCOs should be reviewed regularly, for example annually or semiannually. The study also recommends that the risk monitoring procedures used by the SACCOs should be efficient and easily understandable by the people concerned. The employees should be regularly trained and meetings held regularly in order to make them aware of the risks associated with credit in their SACCOs and to be able to avoid these risks.

To improve financial performance of the SACCOs in Nairobi County, there is need to address the managerial gaps in the areas of training, organization capability, reliability, risk taking propensity and customer relationship management. Training and manpower development is a major problem affecting SACCO management and the overall financial performance of SACCOs in the country. Government must

therefore make the right policies to ensure that SACCOs management committee members can acquire first hand and necessary skills.

The SACCOs should apply proper financing mix in their capital structure. This is due to the fact that capital adequacy showed a strong significant relationship with financial performance of deposit taking SACCOS in Nairobi County. There should, therefore, be optimum mix between share capital, institutional capital, savings and debt capital since any improper mix does not contribute significantly to the financial performance.

The study recommends that Sacco's in Kenya for them to perform better financially must have excellent liquidity, weigh their investment opportunity and be profitable as these were found to strongly determine the financial performance of deposit taking SACCOs in Nairobi County.

5.5 Limitations of the Study

There were challenges which were encountered during the study. Some officers who are concerned with safe custody of SACCO files containing audit reports were initially reluctant to release them. That reluctance delayed the completion of data collection.

Further, the data was tedious to collect and compute as it was in its very raw form. Due to lack of standardization of financial statements from various SACCOs, data computation was made even harder.

In attaining its objective the study was limited to Saccos in Nairobi County. Secondary data was collected from the Saccos registered by SASRA in Nairobi County.

The study was also limited to the degree of precision of the data obtained from the secondary source. While the data was verifiable since it came from the Saccos publications, it nonetheless could still be prone to these shortcomings.

The study was based on a five year study period from the year 2009 to 2013. A longer duration of the study will have captured periods of various economic significances. This may have probably given a longer time focus hence given a broader dimension to the problem.

5.6 Suggestions for Further Research

Since the study focused on the determinants of financial performance of deposit taking Savings and Credit Co-operative Societies in Nairobi County, further studies should be done on all Savings and Credit Co-operative Societies to allow for generalization of findings for the Kenyan Savings and Credit Co-operative Societies.

This study was confined to Savings and Credit Co-operative Societies yet there are many players in the financial sector. There is therefore need to study determinants of financial performance on micro finance institutions, insurance companies, commercial banks and other financial institutions, and how these factors affects their performance in general.

The study also recommends that further studies should be done on the effect of other factors in the SACCOs such as number of branches, number of customers, level of

technological adoption among others. A similar study should also be done whereby the data collection relies on primary data i.e. in-depth questionnaires and interview guide so as to complement this study.

This study focused on deposit taking Saccos in Nairobi County, the same study should be done in other Saccos to find out whether it will yield the same results. The study also suggests that further studies should be done to cover all types of cooperative societies including farmer's cooperative societies in Kenya. Where the researcher will do a comparison between the regression results obtained for SACCOs and farmers cooperatives to examine the difference in terms of signaling for the different types of cooperative societies.

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APPENDICES

Appendix I: List of Deposit Taking Saccos in Nairobi County as at December 2013

1. AFYA SACCO
 2. AIRPORTS SACCO
 3. ASILI SACCO
 4. CHAI SACCO
 5. CHUNA SACCO
 6. COMOCO SACCO
 7. FUNDILIMA SACCO
 8. HARAMBEE SACCO
 9. HAZINA SACCO
 10. JAMII SACCO
 11. KENPIPE SACCO
 12. KENVERSITY SACCO
 13. KENYA BANKERS SACCO
 14. KENYA POLICE SACCO
 15. KINGDOM SACCO
 16. MAGEREZA SACCO
 17. MAISHA BORA SACCO
 18. MWALIMU NATIONAL SACCO
 19. MWITO SACCO
 20. NACICO SACCO
 21. NAFKA SACCO
 22. NAKU SACCO
 23. NASEFU SACCO
 24. NATION STAFF SACCO
 25. ORTHODOX SACCO
 26. SAFARICOM SACCO
 27. SHERIA SACCO
 28. STIMA SACCO
 29. TEMBO SACCO
 30. UKULIMA SACCO
 31. UNITED NATIONS SACCO
 32. WANAANGA SACCO
 33. WANANDEGE SACCO
 34. WAUMINI SACCO
- Source: SASRA (2013)**

Appendix II: Raw Data from the audited financial statements of DTS in Nairobi

Total Assets	2009	2010	2011	2012	2013
Magereza	2,843,164,136	2,942,276,854	3,181,763,043	3,707,062,247	3,824,156,740
Stima	5,124,312,279	6,383,238,958	7,632,596,170	9,483,743,000	12,401,788,000
Wanadege	963,343,667	1,298,209,836	1,206,286,516	1,204,999,335	1,179,389,849
Jamii	937,943,359	1,079,349,412	1,260,339,955	1,521,935,446	1,802,016,744
Asili	873,919,819	989,710,656	1,219,588,295	1,429,029,986	1,577,396,176
Comoco	511,304,242	524,943,721	520,221,821	5,263,547,222	578,342,069
Chuna	1,287,476,441	1,378,438,636	1,536,791,658	1,414,235,675	1,740,316,114
Elimu	474,738,514	529,317,427	624,136,421	644,751,986	784,833,576
Nation Staff	499,265,109	565,531,361	677,144,172	739,255,893	925,307,625
Ufanisi	94,879,853	99,773,289	96,776,379	105,488,066	115,144,314
U N Sacco	3,887,145,888	4,656,875,859	5,610,570,727	6,547,006,192	7,569,117,689
Safaricom	883,071,460	791,486,819	951,927,251	1,064,033,767	1,535,197,310
Kenpipe	930,145,098	1,021,561,197	1,128,394,366	1,267,536,296	1,461,652,953
Waumini	935,048,083	1,149,361,057	1,385,702,083	1,648,371,022	2,130,630,266
Kenversity	721,840,420	734,792,659	848,130,626	954,091,573	1,101,343,093
Chai	1,137,135,356	1,110,090,103	1,214,334,580	1,288,143,364	1,533,892,016
Sheria	1,154,913,476	1,379,585,860	1,638,779,977	2,324,091,802	2,835,831,928
Mwalimu	2,593,050,560	2,992,950,386	19,104,255,837	24,540,360,723	22,007,934,926
Harambee	14,641,124,450	14,724,145,258	15,824,450,641	15,976,682,847	17,633,141,570
Afya	970,136,547	7,946,001,400	9,351,710,222	10,848,416,703	11,885,165,364
Ukulima Sacco	4,246,936,567	4,608,030,020	5,080,073,525	6,420,421,725	7,321,315,578
Police Sacco	5,185,138,402	6,427,563,418	7,722,609,795	8,895,453,241	11,522,841,136
Kenya Bankers	160,045,909	4,109,947,723	4,287,259,898	7,849,098,277	4,287,259,898
Hazina Sacco	44,612,479	52,752,216	2,486,564,472	2,977,957,920	3,574,790,356
Nacico Sacco	1,436,373,899	1,484,664,106	2,333,117,587	2,364,652,350	2,564,895,649
Teleposta Sacco	1,029,300,113	1,309,971,681	1,242,704,663	1,421,045,535	1,645,132,479
Maisha Bora	990,835	1,033,339,475	1,147,804,817	1,275,536,203	1,504,251,618
Nassefu Sacco	945,424,145	967,797,836	914,648,089	991,584,157	937,057,087
Mwito Sacco	508,134,126	520,090,950	611,755,315	722,122,672	855,103,064
Naku Sacco	585,105,098	758,368,374	899,600,029	1,153,346,509	1,497,683,660
Orthodox Sacco	41,853,507	49,100,810	57,719,000	62,840,378	72,707,029
Tembo Sacco	420,768,457	132,963,298	129,296,690	674,955,283	926,294,646
Orient Sacco	495,180,907	480,502,471	502,156,174	505,733,718	531,894,509
Wanaanga Sacco	503,323,859	601,811,524	812,605,415	890,414,260	902,450,233

Net income	2009	2010	2011	2012	2013
Magereza	6,326,825	8,421,280	4,898,933	23,772,128	25,024,140
Stima	106,220,370	123,762,370	183,016,688	226,980,436	256,482,000
Wanadegge	7,696,574	1,382,929	1,695,261	5,572,810	7,823,986
Jamii	3,132,155	5,872,825	22,501,995	50,108,967	65,693,526
Asili	5,739,550	17,254,193	232,986	102,584	543,946
Comoco	1,842,176	2,132,503	3,617,488	3,652,635	2,797,179
Chuna	3,924,144	4,554,964	3,935,424	18,005,161	20,584,069
Elimu	2,742,584	1,684,388	2,461,306	2,898,335	28,097,767
Nation Staff	2,875,141	3,023,465	7,011,713	11,232,573	37,986,854
Ufanisi	394,454	370,626	415,809	939,877	1,502,709
U N Sacco	16,010,033	53,971,512	57,189,608	88,376,576	79,281,709
Safaricom	1,714,510	3,854,314	3,081,878	8,249,730	24,208,584
Kenpipe	21,174,361	17,437,542	11,560,583	22,996,196	23,068,447
Waumini	6,847,393	4,358,664	22,838,457	38,861,345	24,431,741
Kenversity	920,415,640	19,877,312	19,631,932	20,234,991	34,626,658
Chai	4,551,753	4,880,461	6,400,139	11,112,659	29,007,330
Sheria	2,506,034	2,634,458	22,803,251	4,781,476	62,652,240
Mwalimu	244,735,625	700,237,665	448,864,264	685,341,952	532,478,439
Harambee	96,140,004	100,264,150	89,404,140	117,054,350	88,173,340
Afya	15,200,789	166,050	19,029,738	21,115,986	132,203,988
Ukulima Sacco	19,770,047	22,873,763	27,100,937	33,568,991	12,062,029
Police Sacco	39,863,100	118,519,306	224,004,587	274,003	406,703
Kenya Bankers	29,305,191	25,757,235	165,552,072	6,680,710	23,370,497
Hazina Sacco	13,226,640	9,047,449	22,092,183	23,588,774	28,470,587
Nacico Sacco	34,754,293	60,805,425	27,111,888	21,517,403	53,758,550
Teleposta Sacco	4,904,036	5,060,780	6,102,528	6,826,463	7,205,010
Maisha Bora	13,413,274	14,966,870	16,455,964	13,156,758	20,534,038
Nassefu Sacco	32,910,470	29,037,899	13,987,642	30,550,084	36,841,574
Mwito Sacco	4,214,136	6,970,057	3,043,760	5,259,230	5,864,233
Naku Sacco	179,698	1,996,668	2,422,097	3,303,298	32,524,346
Orthodox Sacco	162,444	5,559,317	6,686,877	2,406,197	1,071,760
Tembo Sacco	1,492,979	6,279,524	8,427,813	16,001,515	27,901,015
Orient Sacco	1,906,143	2,045,234	1,407,858	2,297,597	4,307,001
Wanaanga Sacco	1,837,948	1,646,483	618,883	12,632,550	11,859,856

Equity	2009	2010	2011	2012	2013
Magereza Sacco	2,009.00	2,010.00	2,011.00	2,012.00	2,013.00
Stima Sacco	-	2,052,154,154.00	2,506,964,531.00	2,856,321,478.00	3,026,541,236.00
Wanandegge Sacco	435,576,945.00	686,750,371.00	1,025,662,000.00	1,438,543,000.00	1,849,448,000.00
Jamii Sacco	64,011,403.00	64,740,385.00	64,777,056.00	104,439,601.00	111,822,140.00
Asili Sacco	104,848,208.00	127,065,440.00	172,993,916.00	198,657,285.00	275,700,518.00
Comocco Sacco	873,919,819.00	183,599,016.00	192,528,048.00	157,700,479.00	155,656,248.00
Chuna Sacco	15,263,987,410.00	20,843,149.00	23,822,711.00	20,785,582.00	19,505,961.00
Elimu Sacco	18,026,541,365.00	18,812,183.00	26,408,373.00	43,770,054.00	59,257,339.00
Nation Staff Sacco	386,662,250.00	413,794,254.00	563,124,896.00	339,404,000.00	112,043,279.00
Ufanisi Sacco	10,158,264.00	16,847,176.00	28,540,768.00	45,424,029.00	96,074,105.00
UN Sacco	941,879,853.00	7,679,460.00	9,419,428.00	10,773,254.00	11,884,873.00
Safaricom Sacco	3,176,881,825.00	3,930,805,022.00	255,602,169.00	39,364,230.00	480,576,593.00
Kenpipe Sacco	209,142,094.00	158,432,448.00	25,985,508.00	35,111,195.00	83,217,121.00
Waumini Sacco	781,815,651.00	84,493,642.00	92,895,732.00	112,664,818.00	133,970,389.00
Kenversity Sacco	31,999,673.00	69,009,059.00	89,791,814.00	129,253,034.00	154,311,005.00
Chai Sacco	17,852,369,741.00	20,885,628.00	39,486,261.00	58,986,138.00	92,526,169.00
Sheria Sacco	130,383,614.00	122,453,016.00	132,369,852.00	136,976,944.00	175,205,609.00
Mwalimu Sacco	16,708,198.00	27,396,164.00	81,955,294.00	402,709,943.00	470,588,260.00
Harrambee Sacco	12,557,178,133.00	14,389,729,658.00	1,998,051,736.00	2,998,899,069.00	3,687,476,041.00
Afya Sacco	1,526,365,412.00	1,632,147,895.00	1,896,321,562.00	2,033,375,168.00	2,858,805,812.00
Ukulima Sacco	850,653,412.00	247,731,820.00	277,085,185.00	508,875,791.00	833,900,922.00
Police Sacco	875,963,214.00	950,268,741.00	1,356,258,963.00	1,212,934,635.00	1,207,662,889.00
Kenya Bankers Sacco	4,336,958,352.00	371,510,401.00	500,562,993.00	618,849.00	1,655,138.00
Hazina Sacco	3,588,323,235.00	279,312,450.00	300,110,464.00	282,042,007.00	473,238,133.00
Nacico Sacco	76,710,171.00	91,114,207.00	117,709,315.00	193,549,437.00	245,744,382.00
Teleposta Sacco	1,166,283,733.00	1,253,794,346.00	574,099,919.00	605,496,438.00	663,328,752.00
Maisha bora Sacco	79,523,654,123.00	81,999,388.00	150,234,500.00	515,299,212.00	119,511,804.00
Nassefu Sacco	18,258,963,123.00	18,569,325,521.00	20,832,533.00	50,273,964.00	79,547,217.00
Mwito Sacco	632,147,896.00	546,530,475.00	608,940,688.00	108,740,033.00	105,581,678.00
Naku Sacco	23,263,258,362.00	25,263,506.00	37,957,816.00	42,032,447.00	46,413,937.00
Othodox Sacco	52,365,741,985.00	75,553,324.00	85,643,468.00	51,665,682.00	216,222,874.00
Tembo Sacco	2,536,806.00	1,196,789.00	2,508,657.00	8,091,946.00	15,031,576.00
Wanaanga Sacco	23,637,359.00	19,371,748.00	13,217,763.00	674,955,283.00	926,294,646.00
Fundilima Sacco	468,994,417.00	13,731,782.00	29,943,991.00	43,336,530.00	45,787,998.00
#DIV/0!	7,583,066,413	1,369,245,430	391,229,704	454,737,458	553,956,902

Non interest expenses	2009	2010	2011	2012	2013
Magereza	1,452,277.00	121,842,126.00	3,037,787.00	6,871,460.00	105,197,201.00
Stima	1,465,903.00	129,723,116.00	3,891,699.00	17,538,380.00	111,171,930.00
Wanadege	1,587,137.00	148,623,175.00	4,502,964.00	36,002,182.00	98,397,909.00
Jamii	12,117,956.00	13,560,096.00	399,267.00	107,859,226.00	28,185,906.00
Asili	14,896,233.00	15,310,050.00	354,377.00	110,336,045.00	37,084,603.00
Comoco	17,344,730.00	17,498,529.00	197,383.00	126,705,660.00	44,515,170.00
Chuna	2,742,967.00	66,529.00	229,653.00	378,752.00	4,380,894.00
Elimu	3,180,570.00	86,039.00	263,870.00	4,195,984.00	4,365,252.00
Nation Staff	3,497,019.00	81,645.00	280,804.00	325,505.00	76,791.00
Ufanisi	1,072,933.00	1,316,980.00	495,718.00	492,451.00	110,239.00
U N Sacco	11,611,360.00	1,509,867.00	481,261.00	482,371.00	95,709.00
Safaricom	2,377,585.00	1,854,982.00	631,428.00	32,563.00	188,939.00
Kenpipe	1,831,449.00	471,552.00	57,715.00	20,500.00	214,940.00
Waumini	2,748,152.00	326,877.00	64,525.00	28,380.00	212,441.00
Kenversity	3,775,484.00	300,867.00	98,543.00	360,881.00	564,711.00
Chai	3,149,780.00	47,720.00	620,892.00	368,881.00	528,134.00
Sheria	4,610,977.00	67,983.00	539,374.00	325,518.00	632,619.00
Mwalimu	4,678,257.00	83,565.00	373,530.00	61,045.00	642,252.00
Harambee	1,064,080.00	108,835.00	72,383.00	75,263.00	966,708.00
Afya	947,255.00	187,482.00	79,312.00	114,890.00	820,663.00
Ukulima Sacco	1,088,445.00	171,127.00	123,640.00	296,740.00	865,153.00
Police Sacco	1,839,931.00	303,551.00	41,210.00	469,966.00	912,585.00
Kenya Bankers	3,528,419.00	444,413.00	67,895.00	670,228.00	308,149.00
Hazina Sacco	5,627,148.00	726,325.00	81,580.00	37,556.00	288,962.00
Nacico Sacco	3,446,456.00	556,477.00	679,867.00	718,550.00	301,193.00
Teleposta Sacco	4,007,290.00	1,174,870.00	906,507.00	719,828.00	459,526.00
Maisha Bora	4,315,323.00	657,729.00	913,195.00	627,143.00	614,876.00
Nassefu Sacco	2,732,756.00	776,380.00	107,366.00	733,305.00	697,087.00
Mwito Sacco	3,676,330.00	544,303.00	131,050.00	825,175.00	671,806.00
Naku Sacco	4,465,552.00	113,045.00	128,223.00	661,695.00	429,734.24
Orthodox Sacco	229,251.00	149,230.00	516,086.00	598,761.00	396,709.52
Tembo Sacco	343,085.00	151,455.00	2,138,884.00	676,870.00	363,684.80
Orient Sacco	353,824.00	121,770.00	2,162,693.00	299,440.00	330,660.08
Wanaanga Sacco	2,015,099.00	199,291.00	25,881.00	468,070.36	297,635.36

Liquidity	2009	2010	2011	2012	2013
Magereza	0.313	0.355	0.4473	0.5060667	0.5732167
Stima	0.37	0.46	0.5796	0.6794667	0.7842667
Wanadege	0.272	0.358	0.45108	0.53944	0.62898
Jamii	0.425	0.39	0.4914	0.5018667	0.5350667
Asili	0.34	0.468	0.58968	0.7155733	0.8404133
Comoco	0.378	0.464	0.58464	0.6821867	0.7855067
Chuna	0.4495	0.3538	0.445788	0.4126507	0.4107947
Elimu	0.357	0.4762	0.600012	0.7207493	0.8422553
Nation Staff	0.3832	0.38	0.4788	0.5096	0.5574
Ufanisi	0.63	0.354	0.44604	0.29272	0.20074
U N Sacco	0.2741	0.82	1.0332	1.4682	1.84775
Safaricom	0.34	0.3	0.378	0.3773333	0.3963333
Kenpipe	0.261	0.434	0.54684	0.6997867	0.8427067
Waumini	0.492	0.256	0.32256	0.1874133	0.1026933
Kenversity	0.472	0.558	0.70308	0.8087733	0.9243133
Chai	0.423	0.475	0.5985	0.6743333	0.7620833
Sheria	0.291	0.368	0.46368	0.5469067	0.6332467
Mwalimu	0.41	0.393	0.49518	0.5179067	0.5604967
Harambee	0.282	0.4	0.504	0.6173333	0.7283333
Afya	0.336	0.386	0.48636	0.5531467	0.6283267
Ukulima Sacco	0.785	0.659	0.83034	0.8034533	0.8261233
Police Sacco	0.276	0.425	0.5355	0.6716667	0.8014167
Kenya Bankers	0.48	0.474	0.59724	0.63432	0.69294
Hazina Sacco	0.3233	0.44	0.5544	0.6703333	0.7858833
Nacico Sacco	0.38	0.3233	0.407358	0.3975773	0.4112563
Teleposta Sacco	0.3464	0.2898	0.365148	0.3525307	0.3619047
Maisha Bora	0.419	0.46	0.5796	0.6468	0.7271
Nassefu Sacco	0.36	0.5505	0.69363	0.86834	1.035155
Mwito Sacco	0.306	0.343	0.43218	0.4865733	0.5496633
Naku Sacco	0.29	0.386	0.48636	0.5838133	0.6819933
Orthodox Sacco	0.301	0.384	0.48384	0.5724533	0.6638733
Tembo Sacco	0.48	0.4	0.504	0.4853333	0.4973333
Orient Sacco	0.734	0.863	0.8473	0.9280667	0.9847167
Wanaanga Sacco	0.36	0.31	0.3906	0.3841333	0.3994333

CE	2009	2010	2011	2012	2013
Magereza	107,461,206	117,123,265	131,117,324	131,117,324	553,391,765
Stima	12,774,866	321,183,824	481,191,765	481,191,765	567,630,029
Wanadege	681,790,971	755,212,000	1,020,908,000	1,020,908,000	1,313,318,000
Jamii	281,590,618	325,760,029	374,303,912	374,303,912	489,685,882
Asili	44,551,647	68,154,676	116,167,676	116,167,676	165,826,412
Comoco	614,220,265	673,902,059	750,593,324	750,593,324	1,306,883,706
Chuna	16,606,000	36,705,206	44,912,647	44,912,647	63,068,824
Elimu	5,914,029	6,285,647	6,667,882	6,667,882	13,696,765
Nation Staff	38,435,882	48,023,618	87,861,029	87,861,029	1,074,102,412
Ufanisi	77,933,529	99,338,706	114,787,382	114,787,382	161,844,794
U N Sacco	54,988,794	66,264,735	77,434,500	77,434,500	89,835,912
Safaricom	22,636,824	23,889,706	36,078,765	36,078,765	37,820,059
Kenpipe	76,011,735	99,402,412	126,403,088	126,403,088	186,137,971
Waumini	30,058,559	31,385,765	31,980,353	31,980,353	37,809,441
Kenversity	72,221,235	74,334,147	78,050,324	78,050,324	107,843,441
Chai	28,572,088	31,162,794	32,532,471	32,532,471	37,809,441
Sheria	77,020,412	104,796,176	116,443,735	116,443,735	213,733,235
Mwalimu	50,147,147	55,615,235	69,354,471	69,354,471	104,275,912
Harambee	87,436,324	103,214,147	117,123,265	117,123,265	150,781,206
Afya	147,850,735	151,174,059	159,806,206	159,806,206	171,336,971
Ukulima Sacco	10,543,324	11,413,971	12,242,147	12,242,147	17,147,500
Police Sacco	50,242,706	50,200,235	62,771,529	62,771,529	73,590,912
Kenya Bankers	34,571,059	39,030,471	43,872,118	43,872,118	50,890,382
Hazina Sacco	10,500,853	12,433,265	13,473,794	13,473,794	16,213,147
Nacico Sacco	26,671,529	32,999,647	34,549,824	34,549,824	44,764,000
Teleposta Sacco	64,863,206	67,018,588	76,829,294	76,829,294	84,261,647
Maisha Bora	108,990,147	124,173,382	130,788,176	130,788,176	151,630,618
Nassefu Sacco	52,684,765	53,927,029	60,690,471	60,690,471	66,816,853
Mwito Sacco	9,959,353	12,252,765	16,170,676	16,170,676	34,571,059
Naku Sacco	16,266,235	18,294,206	20,863,676	20,863,676	30,408,941
Orthodox Sacco	32,543,088	36,652,118	40,941,647	40,941,647	48,023,618
Tembo Sacco	10,129,235	10,235,412	12,645,618	12,645,618	22,668,676
Orient Sacco	11,976,706	13,102,176	16,245,000	16,245,000	22,774,853
Wanaanga Sacco	16,213,147	18,453,471	19,759,441	19,759,441	31,184,029

ROCE	2009	2010	2011	2012	2013
Magereza	0.0135144	1.0402897	0.0231685	0.052407	0.1900953
Stima	0.114749	0.4038906	0.0080876	0.0364478	0.1958528
Wanadege	0.0023279	0.1967966	0.0044107	0.0352649	0.0749231
Jamii	0.0430339	0.041626	0.0010667	0.2881595	0.0575592
Asili	0.3343587	0.2246368	0.0030506	0.9497999	0.2236351
Comoco	0.0282386	0.025966	0.000263	0.1688073	0.0340621
Chuna	0.1651793	0.0018125	0.0051133	0.0084331	0.0694621
Elimu	0.5378008	0.0136882	0.0395733	0.6292828	0.3187068
Nation Staff	0.0909832	0.0017001	0.003196	0.0037048	7.149E-05
Ufanisi	0.0137673	0.0132575	0.0043186	0.0042901	0.0006811
U N Sacco	0.2111587	0.0227854	0.0062151	0.0062294	0.0010654
Safaricom	0.1050317	0.0776478	0.0175014	0.0009026	0.0049957
Kenpipe	0.0240943	0.0047439	0.0004566	0.0001622	0.0011547
Waumini	0.0914266	0.0104148	0.0020176	0.0008874	0.0056187
Kenversity	0.0522766	0.0040475	0.0012626	0.0046237	0.0052364
Chai	0.1102398	0.0015313	0.0190853	0.0113389	0.0139683
Sheria	0.0598669	0.0006487	0.0046321	0.0027955	0.0029599
Mwalimu	0.0932906	0.0015026	0.0053858	0.0008802	0.0061592
Harambee	0.0121698	0.0010545	0.000618	0.0006426	0.0064113
Afya	0.0064068	0.0012402	0.0004963	0.0007189	0.0047898
Ukulima Sacco	0.1032355	0.0149928	0.0100995	0.0242392	0.0504536
Police Sacco	0.0366209	0.0060468	0.0006565	0.0074869	0.0124008
Kenya Bankers	0.1020628	0.0113863	0.0015476	0.0152769	0.0060552
Hazina Sacco	0.5358753	0.0584179	0.0060547	0.0027873	0.0178227
Nacico Sacco	0.1292185	0.0168631	0.0196779	0.0207975	0.0067285
Teleposta Sacco	0.0617806	0.0175305	0.011799	0.0093692	0.0054536
Maisha Bora	0.0395937	0.0052969	0.0069822	0.0047951	0.0040551
Nassefu Sacco	0.0518699	0.0143969	0.0017691	0.0120827	0.0104328
Mwito Sacco	0.3691334	0.0444229	0.0081042	0.0510291	0.0194326
Naku Sacco	0.2745289	0.0061793	0.0061458	0.0317152	0.0141318
Orthodox Sacco	0.0070445	0.0040715	0.0126054	0.0146247	0.0082607
Tembo Sacco	0.0338708	0.0147972	0.1691403	0.0535261	0.0160435
Orient Sacco	0.0295427	0.0092939	0.1331298	0.0184327	0.0145186
Wanaanga Sacco	0.124288	0.0107996	0.0013098	0.0236884	0.0095445

Management Quality	2009	2010	2011	2012	2013
Magereza	0.0005	0.0414	0.0010	0.0019	0.0275
Stima	0.0003	0.0203	0.0005	0.0018	0.0090
Wanadege	0.0016	0.1145	0.0037	0.0299	0.0834
Jamii	0.0129	0.0126	0.0003	0.0709	0.0156
Asili	0.0170	0.0155	0.0003	0.0772	0.0235
Comoco	0.0339	0.0333	0.0004	0.0241	0.0770
Chuna	0.0021	0.0000	0.0001	0.0003	0.0025
Elimu	0.0067	0.0002	0.0004	0.0065	0.0056
Nation Staff	0.0070	0.0001	0.0004	0.0004	0.0001
Ufanisi	0.0113	0.0132	0.0051	0.0047	0.0010
U N Sacco	0.0030	0.0003	0.0001	0.0001	0.0000
Safaricom	0.0027	0.0023	0.0007	0.0000	0.0001
Kenpipe	0.0020	0.0005	0.0001	0.0000	0.0001
Waumini	0.0029	0.0003	0.0000	0.0000	0.0001
Kenversity	0.0052	0.0004	0.0001	0.0004	0.0005
Chai	0.0028	0.0000	0.0005	0.0003	0.0003
Sheria	0.0040	0.0000	0.0003	0.0001	0.0002
Mwalimu	0.0018	0.0000	0.0000	0.0000	0.0000
Harambee	0.0001	0.0000	0.0000	0.0000	0.0001
Afya	0.0010	0.0000	0.0000	0.0000	0.0001
Ukulima Sacco	0.0003	0.0000	0.0000	0.0000	0.0001
Police Sacco	0.0004	0.0000	0.0000	0.0001	0.0001
Kenya Bankers	0.0220	0.0001	0.0000	0.0001	0.0001
Hazina Sacco	0.1261	0.0138	0.0000	0.0000	0.0001
Nacico Sacco	0.0024	0.0004	0.0003	0.0003	0.0001
Teleposta Sacco	0.0039	0.0009	0.0007	0.0005	0.0003
Maisha Bora	4.3552	0.0006	0.0008	0.0005	0.0004
Nassefu Sacco	0.0029	0.0008	0.0001	0.0007	0.0007
Mwito Sacco	0.0072	0.0010	0.0002	0.0011	0.0008
Naku Sacco	0.0076	0.0001	0.0001	0.0006	0.0003
Orthodox Sacco	0.0055	0.0030	0.0089	0.0095	0.0055
Tembo Sacco	0.0008	0.0011	0.0165	0.0010	0.0004
Orient Sacco	0.0007	0.0003	0.0043	0.0006	0.0006
Wanaanga Sacco	0.0040	0.0003	0.0000	0.0005	0.0003

Size	2009	2010	2011	2012	2013
Magereza	9.4538019	9.4686835	9.5026678	9.5690299	9.5825357
Stima	9.7096356	9.8050411	9.8826723	9.9769798	10.093484
Wanadege	8.9837812	9.1133449	9.0814505	9.0809868	9.0716574
Jamii	8.9721766	9.0331621	9.1004877	9.1823962	9.2557588
Asili	8.9414716	8.9955082	9.0862132	9.1550413	9.1979408
Comoco	8.7086794	8.7201127	8.7161886	9.7212785	8.7621848
Chuna	9.1097393	9.1393874	9.186615	9.1505218	9.2406281
Elimu	8.6764545	8.7237162	8.7952795	8.8093927	8.8947776
Nation Staff	8.6983312	8.7524567	8.8306811	8.8687948	8.9662861
Ufanisi	7.977174	7.9990143	7.9857694	8.0232033	8.0612425
U N Sacco	9.5896308	9.6680947	9.749007	9.8160428	9.8790453
Safaricom	8.9459958	8.8984437	8.9786038	9.0269554	9.1861642
Kenpipe	8.9685507	9.0092644	9.0524609	9.1029604	9.1648443
Waumini	8.9708339	9.0604565	9.1416699	9.217055	9.3285081
Kenversity	8.8584412	8.8661648	8.9284627	8.9795901	9.0419226
Chai	9.0558122	9.0453582	9.0843384	9.1099642	9.1857948
Sheria	9.0625494	9.1397487	9.2145206	9.3662533	9.4526805
Mwalimu	9.413811	9.4760995	10.28113	10.389881	10.342579
Harambee	10.165574	10.16803	10.199329	10.203487	10.24633
Afya	8.9868329	9.9001486	9.970891	10.035366	10.075005
Ukulima Sacco	9.6280758	9.6635153	9.70587	9.8075636	9.8645891
Police Sacco	9.7147604	9.8080464	9.8877641	9.9491681	10.06156
Kenya Bankers	8.2042446	9.6138363	9.6321798	9.8948198	9.6321798
Hazina Sacco	7.6494564	7.7222407	9.3955997	9.4739186	9.5532506
Nacico Sacco	9.1572675	9.1716282	9.3679366	9.3737673	9.4090697
Teleposta Sacco	9.012542	9.1172619	9.0943679	9.152608	9.2162009
Maisha Bora	5.9960013	9.014243	9.059868	9.1056928	9.1773205
Nassefu Sacco	8.9756267	8.9857846	8.961254	8.9963296	8.971766
Mwito Sacco	8.7059784	8.7160793	8.7865778	8.858611	8.9320185
Naku Sacco	8.7672339	8.8798802	8.9540495	9.0619598	9.1754201
Orthodox Sacco	7.6217319	7.6910887	7.7613188	7.7982388	7.8615764
Tembo Sacco	8.6240432	8.1237318	8.1115874	8.829275	8.9667492
Orient Sacco	8.6947639	8.6816956	8.7008388	8.7039219	8.7258255
Wanaanga Sacco	8.7018475	8.7794605	8.9098797	8.9495921	8.9554233