FACTORS INFLUENCING FINANCIAL PERFORMANCE OF DEPOSIT-TAKING SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN KISII COUNTY, KENYA.

BY

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS IN PROJECT PLANNING AND MANAGEMENT OF THE UNIVERSITY OF NAIROBI.

2015
DECLARATION

This research project is my own original work and has not been presented for a ward of degree any other university.

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This research project has been submitted for examination with my approval as the University supervisor.

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DEDICATION

I dedicate this research project to my beloved wife Gladys Nyamorambo, my children Gloria, Mercy, Faith and Joshua who gave me moral support for me to complete it and for their never ending love and constant encouragement to pursue all my dreams and heart desires.
ACKNOWLEDGEMENTS

My sincere thanks goes to the University of Nairobi for giving me the opportunity to join this program and also thank my supervisor Prof. Charles Rambo, PhD, chairman department of extra mural for the guidance, support and consistent instructions he gave to me to ensure that I complete this work.

Further, much appreciation will go to the SACCOs that endeavoured to provide more insight into the factors influencing their performance.

I also acknowledge all my lecturers of Kisii extra mural Centre who covered all the course work required to complete this program and for constant follow-ups during the project writing.

I also wish to express my sincere thanks and appreciation to my colleagues at work for taking up my duties when I was busy preparing this research project.

Finally I would like to highly appreciate the immense assistance that I received from several other people whom I have not mentioned here, may the almighty Lord bless you exceedingly abundantly above all.
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LIST OF ABBREVIATIONS AND ACRONYMS

AHP - Analytic Hierarchy process

AIA - American Insurance Association

CAMELS: Capital adequacy, Asset quality, Management, Earnings, Liquidity, Sensitivity to market risk

CAR - Capital adequacy ratio

CEO – Chief Executive Officer

DEA - Data Envelopment Analysis

DTS - Deposit Taking Sacco

EU - European Union

FOSA - Front Office Savings and Credit Activity

GOK - Government of Kenya

KSH - Kenya Shillings

MENA - Middle East and North Africa

NIM - Net interest Margin

NPA - Non Performing Assets

NPL - Non performing loans

PCA: Prompt Corrective Action

RoA - Return on Assets

RoE - Return on Equity

SACCOs - Savings and Credit Cooperative Societies

SASRA - SACCO Societies Regulatory Authority

UFIRS - Uniform Financial Investigation rating system

USA - United States of America
ABSTRACT

SASRA adopted CAMELS model to supervise and monitor Deposit Taking SACCOs in Kenya. Little exists in literature on evaluation of factors influencing the financial performance of deposit-taking SACCOs and this study aimed to bridge the gap and it further sought to answer the question about which particular component of the CAMELS framework mostly affects performance of DTS. The purpose of the study was to evaluate factors influencing the financial performance of deposit-taking SACCOs in Kisii County, Kenya and focused on CAMELS variables. The study was guided by the following objectives, to determine the extent to which capital adequacy influences the financial performance of a DTS; to assess the extent to which Asset Quality influences the financial performance of a DTS; to investigate the extent to which Management ability influences the financial performance of a DTS; to identify the extent to which Earnings influence the financial performance of a DTS and finally to establish the extent to which Liquidity management influences the financial performance of a DTS. The research used a descriptive research design. The main focus of this study was quantitative. However some qualitative approach was used in order to gain a better understanding, which enabled a better and more insightful interpretation of the results from the quantitative study. Target population was the 110 SACCO Managers in Kisii County of the 5 licenced DTS, 86 Managers served as a sample size. Both primary and secondary data was collected. Primary data was obtained through self-administered questionnaires with closed and open-ended questions. Secondary data constituted the income statements and balance sheet sourced from the SACCOs audited annual reports and financial statements for the five year period, between 2010 to 2014 and got some from SASRA annual review reports and internet. Descriptive analysis method was used to analyse data using excel. The findings revealed that capital adequacy, asset quality, management capability, earning quality do significantly influence financial performance of the DTS in Kisii County. It was also observed that there is a significant difference between performance of rural agricultural based DTS and urban-civil servants based DTS. The study finds that DTS specific variables by large explain the variation in profitability. High performance is related to the ability of DTS to control their credit risk, diversify their income sources by incorporating non-traditional banking services and control their overhead expenses. The result suggests that the Kenyan Government should set policies that encourage DTS to raise their assets and capital base as this will enhance the performance of the sector. Another implication of the study is that DTS need to invest in technologies and management skills, which minimize costs of operations as this, will impact positively on their growth and sustainability. Four of the DTS are competing for the same resource and are agricultural rural based. There is need of merging those DTS into one larger DTS for better performance. Large DTS capacity to provide efficient banking services should be the area that needs to be focused on. In addition, the currently observed aggressive move to open branches should be taken care of so as to reduce the negative impact on their performance due to cost increases.
CHAPTER ONE
INTRODUCTION

1.1 Background of the study

In order to evaluate the financial performance of banking and financial sector the researchers, academicians and policy makers have investigated several studies in different perspectives and in different time periods.

In India the economic growth of Indian economy flourished with the introduction of the era of LPG (generally known as liberalization, privatization and globalization). “Financial sector in general and banking sector in particular is one of the vital ingredients for the economic development of the country. A resilient and vibrant banking system is very crucial for sound and accelerated economic growth.” For this reason it can be said that the growth of the economy depend on financial soundness of banking sector. Supervision of banking unit can help to make them financially sound. CAMEL model of rating was first developed in the 1970s by the three federal banking supervisors of the U.S (the Federal Reserve, the FDIC and the OCC) as part of the regulators” “Uniform Financial Institutions Rating System”, to provide a convenient summary of bank condition at the time of its on-site examination. The banks were judged on five different components under the acronym C-A-M-E-L: Capital adequacy, Asset quality, Management efficiency, Earning quality and Liquidity.

Globally, Hays, Stephen and Arthur (2009) analyzed the efficiency of community banks in the United States using data from year-end 2006-2008. They developed a multivariate discriminant model based on the CAMEL(S) model, to differentiate between low efficiency and high efficiency community banks by using the efficiency ratio as the independent variable. The results on the significance of the individual CAMEL components provide mixed results for different periods apart from the sensitivity to market risk, which is found to be statistically insignificant.

In India, Vijayakumar(2012)used CAMEL model to evaluate performance of Banks and concluded that the banks under study had succeeded in maintaining capital adequacy ratio at higher level than the prescribed level (more than 9 per cent) during the study period. It was also evident that the dependents of debt capital had increased; assets quality ratios registered a
declining trend and therefore was an improvement in the asset quality. Similarly, the management efficiency ratio registered increasing trend, the earning quality measured in terms of ratio of operating profit to average working fund and net profit to average assets indicated that some banks had outperformed others during the study period. Further, interest income to total income, non-interest income to total income indicated the efficiency of banks in generating income from their operations and the Liquidity ratio was in a better position during the study period.

Kabir and Dey (2012) examined the performance Private, Commercial of Bangladesh banks by adopting the CAMEL Model. The author concluded that the central banks of all around the world have improved their supervision quality and techniques.

Prasad and Ravinder(2012) analyzed performance of nationalized banks in India. Gupta and Kaur (2008) conducted the study with the main objective to assess the performance of Indian Private Sector Banks on the basis of Camel Model and gave rating to top five and bottom five banks.

Still in India, a study on regional rural banks Reddy, Maheshwara and Prasad (2011) discussed the financial performance of selected regional rural banks during post reorganization period. The study adopted CAMEL model to examine the overall performance of Andhra Pragathi Grameena Bank and Sapthagiri Grameena Bank. Similarly a study on State Bank Group by Siva and Natarajan (2011) empirically tested the applicability of CAMEL norms and its consequential impact on the performance of SBI Groups. The study concluded that annual CAMEL scanning helps the commercial bank to diagnose its financial health and alert the bank to take preventive steps for its sustainability.

Chaudhry and Singh (2012) analyzed the impact of the financial reforms on the soundness of Indian Banking through its impact on the asset quality. The study identified the key players as risk management, NPA levels, effective cost management and financial inclusion. Mishra (2012) analyzed the performance of different Indian public and private sector banks over the decade 2000-2011 using CAMEL approach and found out that private sector banks are at the top of the list, with their performances in terms of soundness being the best.
Mishra and Aspal (2013) evaluated the performance and financial soundness of State Bank Group using CAMEL approach and rated different banks using Capital adequacy, Asset quality Management efficiency, Earning Quality, and Liquidity. They found that though ranking of ratios is different for different banks in the State Bank group there is no statistically significant difference between the CAMEL ratios.

Gupta (2014) analyzed public banks in India and found that there is a statistically significant difference between the CAMEL ratios and thus the performance of all the public financial institutions.

Ilhomovich (2009) used cash to deposit ratio to measure the liquidity level of banks in Malaysia. However, Said and Tumin (2011) conducted a study in China and Malaysia and found that liquidity level of banks has no relationship with the performances of banks.

In Turkey, Mikail, et. al., (2014) did a study to examine performance of private and state owned banks among fifteen banks in Turkey during 2005-12. This study highlighted ranking of fifteen banks for their performance with respect to CAMEL ratios. It revealed that all banks that were examined in the research were in higher levels.

In Africa, Ifeacho (2014) studied the performance of the South African Banking Sector Since 1994 and found out that all bank-specific variables are statistically significant at conventional levels for both return on assets (ROA) and return on equity (ROE) equations. Specifically, the study had shown that asset quality (measured by assets to capital employed ratio), management quality (measured by operating profits per employee ratio), and liquidity (measured by quick ratio) have a positive relationship with both measures of bank performance, which is consistent with a priori theoretical expectations. However, the leverage ratio, which is a measure of capital adequacy, shows a surprising significant negative relationship with ROA, whereas its relationship with ROE is significant and positive as expected.

Ansah (2015) did a study in Ghana Using CAMEL Rating System to assess the Performance of Local and Foreign Banks results from the study indicated that not all the CAMEL variables affect Banks performance in Ghana in terms of ROA and ROE.
In the Kenyan context, Olweny and Shipo (2011) adopted the CAMEL model and analyzed the determinants of bank failures in Kenya. They found that Asset quality and liquidity are the determinants of Kenyan bank failures. Ongore and Kusa (2013) concluded that the financial performance of commercial banks in Kenya is driven mainly by board and management decisions, while macroeconomic factors have insignificant contribution.

SASRA in 2012 adopted the CAMELS framework to assess the financial soundness of Sacco’s focusing on prudential standards. The adoption and implementation of CAMELS performance evaluation tool ensure objectivity and standardization in monitoring of the financial soundness and stability of individual Sacco’s. The report by SACCO Society Regulation authority (SASRA) evaluates the performance of the SACCO subsector based on the financial data and information extracted from audited financial statements. 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. Further, Licensed deposit taking SACCOs constitute over 72% in key financial indicators of the entire industry in terms of membership, assets, loans, deposits and capital. This is a significant portion and hence the financial soundness of the licensed deposit taking SACCOs reflects the soundness of the entire Sacco industry. The subsector remains relatively financially stable in 2013 as supported by compliance with the minimum prudential requirements in capital, liquidity, improved asset quality and overall earnings. This is expected to remain as SASRA continues to implement a risk-rating framework to monitor financial soundness of the industry and also issue regulatory guidelines to enhance compliance with sound business practices (SASRA Supervision Report, 2013).

In view of the above, therefore the researcher evaluated factors that influence the financial performance of deposit-taking SACCOs and concentrated on CAMEL variables with a view of determining, assessing, investigating, identifying and examining the extent to which they influence performance.

1.2 Statement of the Problem
The Sacco Movement in Kenya has faced a number of challenges that need to be addressed in order to enable them improve on; soundness and stability, effective and efficient corporate
governance, product diversity and competition as well as integration to the formal financial system. The major challenges in the cooperative movement in Kenya include; poor governance and limited transparency in the management of cooperatives, lack of capacity in management, market intelligence and market research, weak capital base and infrastructure weaknesses, high deployment and maintenance costs, inadequate financing or adoption of financing models among others (KUSCCO 2010).

Regarding the current study, comparing with previous work done on banks, it’s important to pinpoint some differences that may justify its importance. Most of previous work focuses on a few of CAMEL dimensions, while the current study shall elaborate all of them; The previous studies focused on banks, while the current study will focus on Deposit-Taking Saccos in Kisii County, Kenya; DTS are member-owned, driven by the needs of members and work for the benefit of members and the community; DTS are vehicles for social cohesion and the advancement of community; and in DTS equality among members and democratic control are central to the operations and governance.

It is important also to note that little exists in literature on evaluation of factors influencing the financial performance of deposit-taking SACCOs and this study aimed to bridge the gap and it further sought to answer the question about which particular component of the CAMELS framework mostly affected performance of SACCOs, their relative order and rank and hopefully by doing this it will assist SACCO authorities and management to formulate policies and strategies that can help maximize financial performance.

1.3 Purpose of the study

The purpose of this study was to evaluate factors influencing the financial performance of deposit-taking SACCOs in Kisii County, Kenya.
1.4 Research Objectives
The following objectives guided the study;

1. To determine the extent to which capital adequacy influences the DTS’ financial performance;
2. To assess the extent to which Asset Quality influences the DTS’ financial performance;
3. To ascertain the extent to which Management ability influences the DTS’ financial performance;
4. To identify the extent to which Earnings influence the DTS’ financial performance;
5. To establish the extent to which Liquidity management influences the DTS’ financial Performance;

1.5 Research Questions
1. To what extent does capital adequacy influence a DTS’ financial performance?
2. To what extent does asset quality influence a DTS’ financial performance?
3. To what extent does management capability influence a DTS’ financial performance?
4. To what extent does earnings influence a DTS’ financial performance?
5. To what extent does liquidity management influence a DTS’ financial performance?

1.6 Significance of the Study
The findings of this study would be valuable to researchers and scholars, as it forms a basis for further research in the SACCO business in Kenya and evaluation of the factors that influence their financial performance. I hope it will also act as a guide to the SACCOs’ Board of Directors and management in making relevant decisions and strategies to ensure sustainable competitive advantage and compliance with the set standards.

1.7 Basic Assumptions of the study
The researcher assumed that all the identified respondents would be supportive in answering the questions posed and they would answer questions correctly and truthfully.
1.8 Limitations of the Study

The study was limited to five DTS only. The information researcher sought to get from the targeted SACCOs in Kisii county were very sensitive and therefore High assurance of confidentiality was required. Due to the confidentiality, the Researcher found it fairly tough to access certain types of materials, which would limit the perfection of the study but the author got the quantitative figures from SASRA’s yearly review reports, others from the County Cooperative director and internet

1.9 Delimitations of the study

The study was confined to the evaluation of factors influencing financial performance of deposit taking SACCO programmes in Kisii County and concentrated on CAMEL variables. The researcher believed that this would provide an adequate population and sample for the study and therefore gave reliable results and findings.

1.10 Definition of Significant Terms used in the study

**Asset quality:** - Asset quality of a bank is judged based on the potential credit risk associated with the loan.

**CAMELS’ model:** - Assessment of Financial Health of a bank.

**Capital adequacy:** - It is an indicator that shows whether the financial institution has enough capital to observe unexpected losses.

**Deposit taking SACCO:** - An institution which is licensed to receive money on deposit from private individuals and to pay interest on it, e.g. a building society, bank or friendly society

**Earnings:** - This assesses in the quantity of income in terms of income generated by core activity i.e., income from lending operations.

**Financial Institution:** -

An establishment that focuses on dealing with financial
transactions, such as investments, loans and deposits. Conventionally, financial institutions are composed of organizations such as banks, trust companies, insurance companies and investment dealers.

**Financial performance:**

A subjective measure of how well a firm can use assets from its primary mode of business and generate revenues.

**Influence:**

A power affecting a person, thing or cause of events, especially one that operates without direct or apparent effort.

**Liquidity:**

Liquidity refers to the existence of the cash or near cash form.

**Management quality:**

Management quality is basically the capability of the board of directors and management, to identify, measure, and control the risks of an institution's activities and to ensure the safe, sound, and efficient operation in compliance with applicable laws and regulations.

**Sensitivity:**

market risk

### 1.11 Organization of the study

This research report is organized in five chapters with chapter one featuring the background of the study, statement of the problem, purpose of the study and objectives of the study. Included also in chapter one are the research questions, significance of the study and limitations of the study. Besides, delimitations of the study significant terms are also defined.

Chapter two captures the study literature review against the backdrop of the key study variables. It also highlights the theoretical framework and the conceptual framework of the study.

Chapter three describes the research methodology that was used in the study including the research design, target population, sample size and sampling procedure, data collection procedure data analysis technique and ethical considerations.
Chapter four involves data analysis, presentation of data after each theme, interpretations and discussions.

Finally, Chapter five has a summary of findings, conclusions and recommendations.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This section discusses various theories that were used to evaluate financial factors that influence performance of deposit taking financial institutions. Theories relevant to this research have been discussed. It tries to present some of previous work, which has been conducted in the field of “bank performance”, as measured by CAMEL indicators.

2.2 Overview of Financial performance of Deposit Taking SACCOs

The concept of performance is defined with efficiency and efficacy, because the efficacy indicates accomplishing the goals and efficiency implies how the resources are applied for fulfilling the objectives and can be considered as two main aspects of performance. That is, there can be both internal reasons (efficiency) and external reasons (efficacy) underlying the special parts of performance (‘Abasgholipour, 2010). Mean four financial indices (i.e. profitability, stock price, balance between resources and consumptions, and assets value based on the bank financial experts’ ideas) indicates bank financial performance.

Financial soundness is a situation where depositor’s funds are safe in a stable banking system. The financial soundness of financial institution may be strong or unsatisfactory varying from one bank to another (BOU, 2002). The objective of financial statement is to provide information about the financial position, performance and the changes in the financial position of an organization that is useful to a wide range of users in making decision (Nkundabayanga, 2009).

Many studies have shown that business cycles significantly affect bank performance (for example Al- Tamimi, 2010; Athanasoglou et al., 2005; Heffernan & Fu, 2008). Since firms’ and households’ ability to service their debt plays an important role in ensuring bank stability, bank performance is expected to follow a pro-cyclical pattern. Supporting this hypothesis, Naceur and Kandil (2009) maintain that factors that adversely affect bank profitability arise from the deterioration of economic activity.

Loans and advances issued by banks also explain the pro-cyclical nature of bank performance. Lending is the core business of banks, and the interest generated from loans is often the largest
source of income for commercial banks. Accordingly, interest income from lending is expected to have a positive relationship with banks performance. If, however, these loans, which constitute debt on the part of the borrower, are not paid back when due or if the debts are not adequately serviced, bank performance may be adversely affected.

According to Saidov (2009), today’s competitive banking environment has experienced the need for the use of various methods to evaluate risks and returns involved in banking. This is probably because it is not easy to measure efficiency as well as competitiveness of financial institutions, owing to the fact that their products and services are mostly intangible (Kosmidou & Zopounidis, 2008).

Different statistical techniques have been used in the analysis of bank performance. The traditional approach for bank performance evaluation is the financial ratios analysis. However, there is no combination of financial ratios for a complete and satisfactory evaluation of bank operations efficiency. In consequence, financial ratio analyses are complemented with different bank quality evaluations such as equity structure and management quality.

The existing literature on the determinants of bank performance has concentrated on examining either single countries or a panel of countries. Several studies have found that bank sector performance is influenced by the cost to income ratio, operating expenses, and ratio of equity to total assets (Oladele & Sulaimon, 2012; Ivey, Gropper, & Rutherford, 2005; Said & Tumin, 2011; Shipho & Olweny, 2011). Among others, these studies have observed that holding the correct quantity of liquid assets, enhancing capital bases, decreasing functional expenses, improving the quality of assets and using diversifying revenue sources increase the profitability of commercial banks.

Bordeleau and Graham (2010) found a nonlinear association between liquidity and profitability in the United States of America (USA) and Canada for the period 1997–2009. They demonstrated that certain liquid assets enhance bank profitability. They further showed that ceteris paribus, there is a certain level beyond which keeping additional liquid assets reduces profitability. The study also found evidence that the correlation between profitability and holding liquid assets hinges on the business model of the bank, economic conditions, and risks related to
financing market complexities. These results are corroborated by Shahchera (2012) and Al-Khoury (2011). However, Said and Tumin (2011) found that liquidity and the magnitude of banks do not have any impact on bank performance in a study of Malaysia and China, in agreement with Shen, Kao, Chen, and Yeh (2009).

The impact of inflation on bank performance has also been studied extensively (Boyd, Levine, & Smith (2000); Awojobi, Amel, & Norouzi (2011); Ogege, Williams, & Emerah (2012); Kosmidou, (2008). On the whole, these studies have found a negative relationship between the rate of inflation and bank performance.

In conclusion, bank performance can be measured by using both qualitative and quantitative techniques. Numerous studies have been done on the different determinants of bank performance measured in term of; capital adequacy, asset quality, management quality, earnings, liquidity and sensitivity and are the variables this study will concentrate on.

2.3 Capital Adequacy on financial performance of Deposit Taking SACCOs

Capital is one of the bank specific factors that influence the level of bank performance. Capital is the amount of own fund available to support the bank's business and act as a buffer in case of adverse situation (Athanasoglou et al. 2005). Banks capital creates liquidity for the bank due to the fact that deposits are most fragile and prone to bank runs. Moreover, greater bank capital reduces the chance of distress (Diamond, 2000). However, it is not without drawbacks that it induce weak demand for liability, the cheapest sources of fund Capital adequacy is the level of capital required by the banks to enable them withstand the risks such as credit, market and operational risks they are exposed to in order to absorb the potential loses and protect the bank's debtors. According to Dang (2011), the adequacy of capital is judged on the basis of capital adequacy ratio (CAR).

Capital adequacy, according to Sangmi and Nazir (2010), is a reflection of the inner strength of a bank. Some of the ratios that measure capital adequacy include capital adequacy ratio (CAR), leverage ratio, and net worth protection. The leverage ratio, which is also referred to as the debt to equity ratio (debt/shareholders equity), is adopted in this study.
Berger et al. (2008) demonstrates the reasons for this “excess” capital using annual panel data from 1992 through 2006. Results indicate that U.S. banks hold significantly more equity capital than required by their regulators. Besides, findings show that BHCs actively manage their capital ratios (as opposed to passively allowing capital to build up via retained earnings), set target capital levels substantially above well-capitalized regulatory minima, and (especially poorly capitalized BHCs) make rapid adjustments toward their targets.

Guidara et al. (2010) documents the countercyclical behavior of Canadian banks’ capital buffer from 1982 to 2010 for the six largest Canadian chartered banks. Results show that the adoption of Canadian banking regulations is effective in rendering Canadian banks’ capital countercyclical to business cycles. Findings indicate that Canadian banks hold more capital buffer in recession than in expansion.

Capital provides a cushion to fluctuations in earnings so that firms can continue to operate in periods of loss or negligible earnings. It also provides a measure of reassurance to the members that the organization will continue to provide financial services. Likewise, capital serves to support growth as a free source of funds and provides protection against insolvency. While meeting statutory capital requirements is a key factor in determining capital adequacy, the firms operations and risk position may warrant additional capital beyond the statutory requirements. Maintaining an adequate level of capital is a critical element. Firms that are less than "adequately capitalized" must operate under an approved net worth restoration plan. Examiners evaluate capital adequacy by assessing progress toward goals set forth in the plan.

Determining the adequacy of a firms’ capital begins with a qualitative evaluation of critical variables that directly bear on the institution's overall financial condition. Included in the assessment of capital is the examiners opinion of the strength of the firms’ capital position over the next year or several years based on the firms’ plan and underlying assumptions. Capital is a critical element in the firms’ risk management program. The examiner assesses the degree to which credit, interest rate, liquidity, transaction, compliance, strategic, and reputation risks may impact on the firms’ current and future capital position.

2.4 Assets quality on financial performance of Deposit Taking SACCOs

The asset side of a Bank’s balance sheet is another bank specific variable that affects the
performance of a bank. Even if the total package of the Bank’s asset consist of various asset components such as cash, deposit with banks including reserves at the NBE, loans, investments, fixed assets etc, there seems an agreement to focus on the quality of the loan portfolio. This seems due to the large size of loans in the Banks balance sheet which mainly emanated from the inherited intermediation activity of banks. In addition, more often bank loan of a bank is the major asset that generates the major share of the banks income. Hence the quality of loan portfolio determines the profitability of banks. The highest risk facing a bank is the losses derived from delinquent loans and its highly affects the performance of Banks (Dang, 2011). Liu and Wilson (2010) find that a deterioration of the credit quality reduces the ROA and ROE.

According to Grier (2007), “poor asset quality is the major cause of most bank failures”. A most important asset category is the loan portfolio; the greatest risk facing the bank is the risk of loan losses derived from the delinquent loans. The credit analyst should carry out the asset quality assessment by performing the credit risk management and evaluating the quality of loan portfolio using trend analysis and peer comparison. Measuring the asset quality is difficult because it is mostly derived from the analyst’s subjectivity.

Hassan and Sanchez (2007) examines banking performance concerning with asset quality (beside capital adequacy and earnings), using Data Envelopment Analysis (DEA). The authors estimate and compare the efficiency and productivity of seven Latin American countries (Argentina, Brazil, Chile, Colombia, Ecuador, Mexico and Venezuela) during the period from 1996 to 2003. The study finds that most of the sources of inefficiencies are regulatory rather than technical. This means that bank managers do not choose the correct (optimal) input and output mix, because they are not forced to do so by the environmental conditions (either government regulations or market conditions).

Another important study of Acharya et al. (2009) shows that market freezes depend on how information about asset quality is revealed. They illustrate that when there is a constant probability that “bad news” is revealed each period and, in the absence of bad news, the value of the assets is high. By contrast, for the “good news”, the value of the assets is low.

Frost (2004) stresses that the asset quality indicators highlight the use of non-performing loans ratios (NPLs) which are the proxy of asset quality, and the allowance or provision to loan losses
reserve. As defined in usual classification system, loans include five categories: standard, special mention, substandard, doubtful and loss. NPLs are regarded as the three lowest categories which are past due or for which interest has not been paid for international norm of 90 days. In some countries regulators allow a longer period, typically 180 days. The bank is regulated to back up for loan loss to total loans and the provision for loan loss to total loans should also be taken into account to estimate thoroughly the quality of loan portfolio.

The asset quality rating is a function of present conditions and the likelihood of future deterioration or improvement based on economic conditions, current practices and trends. The examiner assesses firms’ management of credit risk to determine an appropriate component rating for Asset Quality. Interrelated to the assessment of credit risk, the examiner evaluates the impact of other risks such as interest rate, liquidity, strategic and compliance. The quality and trends of all major assets must be considered in the rating. This includes loans, investments, other real estate owned and any other assets that could adversely impact a firms’ financial condition.

The bank's asset is another bank specific variable that affects the profitability of a bank. The bank asset includes among others current asset, credit portfolio, fixed asset, and other investments. Often a growing asset (size) related to the age of the bank (Athanasoglou et al., 2005). More often than not the loan of a bank is the major asset that generates the major share of the banks income. Loan is the major asset of commercial banks from which they generate income. The quality of loan portfolio determines the profitability of banks. The loan portfolio quality has A direct bearing on bank profitability. The highest risk facing a bank is the losses derived from delinquent loans (Dang, 2011). Thus, nonperforming loan ratios are the best proxies for asset quality. Different types of financial ratios used to study the performances of banks by different scholars. It is the major concern of all commercial banks to keep the amount of nonperforming loans to low level. This is so because high nonperforming loan affects the profitability of the bank. Thus, low nonperforming loans to total loans shows that the good health of the portfolio a bank. The lower the ratio the better the bank performing (Sangmi and Nazir, 2010).
2.5 **Management on financial performance of Deposit Taking SACCOs**

This parameter measures or evaluates the capability of the management of a bank to aggressively deploy its resources and utilize the facilities in the bank productively and in the process reduce costs and maximize income (Purohit & Mazumdar, 2003). Amongst the five CAMEL variables, the measurement of management quality is apparently the most subjective, particularly because it is usually appraised and allocated a score by the bank examination staff (Hays, De Lurgio, & Gilbert, 2009). In other words, management capability is a qualitative measure and can only be understood and quantified by subjective evaluation of management control mechanisms or organizational culture (Sangmi & Nazir, 2010, p. 46). Management capability can also be measured using other ratios such as earning per employee, operating profit per employee, expenditure per employee and average number of active borrowers per credit officer. This study adopts operating profit per employee as a proxy for this parameter.

One of this ratios used to measure management quality is operating profit to income ratio (Rahman et al. in Ilhomovich, 2009; Sangmi and Nazir, 2010). The higher the operating profits to total income (revenue) the more the efficient management is in terms of operational efficiency and income generation. The other important ratio is that proxy management quality is expense to asset ratio. The ratio of operating expenses to total asset is expected to be negatively associated with profitability. Management quality in this regard, determines the level of operating expenses and in turn affects profitability (Athanasoglou et al. 2005).

Others say Management Efficiency is one of the key internal factors that determine the bank profitability but appears to be one of the complexes subject to capture with financial ratios (Ongore 2013). However, different authors try to use financial ratios of the financial statements to act as a proxy for management efficiency. One of these ratios used to measure management quality is operating profit to income ratio (Rahman et al. 2009; Sangmi and Nazir, 2010). However, some used the ratio of costs to total assets (Nassreddine, 2013). In whatever way the argument goes measuring the management efficiency requires to get deep into evaluation of the management systems, organizational discipline, control systems, quality of staff, and others. In the Ethiopian context the regulatory organ considers all the aforesaid variables. Hence, a single quantitative measure of the management performance is not set.
Management quality is basically the capability of the board of directors and management, to identify, measure, and control the risks of an institution's activities and to ensure the safe, sound, and efficient operation in compliance with applicable laws and regulations (Uniform Financial Institutions Rating System 1997, p. 6).

Grier (2007) suggests that management is considered to be the single most important element in the CAMEL rating system because it plays a substantial role in a bank’s success; however, it is subject to measure as the asset quality examination.

AIA approach to bank analysis states that the management has clear strategies and goals in directing the bank’s domestic and international business, and monitors the collection of financial ratios consistent with management strategies. The top management with good quality and experience has preferably excellent reputation in the local communication.

Management is the most forward-looking indicator of condition and a key determinant of whether a firm possesses the ability to correctly diagnose and respond to financial stress. The management component provides examiners with objective, and not purely subjective, indicators. An assessment of management is not solely dependent on the current financial condition of the firm and will not be an average of the other component ratings.

Reflected in this component rating is both the board of directors' and management's ability to identify, measure, monitor, and control the risks of the credit union's activities, ensure its safe and sound operations, and ensure compliance with applicable laws and regulations. Management practices should address some or all of the following risks: credit, interest rate, liquidity, transaction, compliance, reputation, strategic, and other risks.

2.6 Earnings on Financial performance of Deposit taking SACCOs
Concerning with Earnings (E), Curry et al. (2006) quantifies the impact of bank supervision (measured using CAMEL composite and component ratings) on loan growth. The authors perform dynamic loan growth equations using regressions for two distinct sub-periods: (1) 1985 to 1993 (covers the credit crunch period), and (2) 1994 to 2004 (covers the sustained recovery period). For the first period, they find that business lending is the most sensitive to changes in CAMEL ratings, while for the second period; they find little evidence that changes in CAMEL
ratings had any systematic effect on loan growth.

Paul and Kaestner (2007) analyzes the banking industry’s profitability, using a sample of around 3000 European banks. Results show that the institutional characteristic ownership of savings banks is the most powerful input factor. Banks located in countries with a minimum initial privatization success indicate a significantly higher profitability than banks resident in countries with publicly dominated savings banks sectors.

Ben Naceur and Omran (2011) examines the impact of bank regulation, concentration, and development on bank profitability across a broad selection of Middle East and North Africa (MENA) countries, during the period from 1989 to 2005. The empirical results suggest that bank-specific characteristics, in particular bank capitalization and credit risk, have a positive and significant impact on banks’ net interest margin and cost efficiency.

Petrella and Resti (2012) investigates the information role of the stress tests. They examine the 2011 European stress test exercise to assess whether and how it affected bank stock prices (and consequently bank profitability). Using event study analysis of 3400 data points for 90 banks, results show that informational content is considered relevant by investors.

In accordance with Grier (2007)’s opinion, a consistent profit not only builds the public confidence in the bank but absorbs loan losses and provides sufficient provisions. It is also necessary for a balanced financial structure and helps provide shareholder reward. Thus consistently healthy earnings are essential to the sustainability of banking institutions. Profitability ratios measure the ability of a company to generate profits from revenue and assets. The continued viability of a financial firm depends on its ability to earn an appropriate return on its assets which enables the institution to fund expansion, remain competitive, and replenish and/or increase capital. In evaluating and rating earnings, it is not enough to review past and present performance alone.

Future performance is of equal or greater value, including performance under various economic conditions. Examiners evaluate "core" earnings: that is the long-run earnings ability of a firm discounting temporary fluctuations in income and one-time items.
2.7 Liquidity on financial performance of Deposit Taking SACCOs

Liquidity is another factor that determines the level of bank performance. Liquidity refers to the ability of the bank to fulfill its obligations, mainly of depositors. According to Dang (2011) adequate level of liquidity is positively related with bank profitability. The most common financial ratios that reflect the liquidity position of a bank according to the above author are customer deposit to total asset and total loan to customer deposits.

Other scholars use different financial ratio to measure liquidity. For instance Ilhomovich (2009) used cash to deposit ratio to measure the liquidity level of banks in Malaysia. However, the study conducted in China and Malaysia found that liquidity level of banks has no relationship with the performances of banks (Said and Tumin, 2011).

Banking liquidity risks are due to two reasons: the first is represented by liabilities side, where depositors withdraw of their deposits, and this requires sufficient liquidity to meet these requirements. The second is due to assets side, where the bank should have sufficient liquidity to give required facilities to their borrowers (Saunders, 1994, p. 293).

Vazquez and Federico (2012) analyzes the performance of about 11000 banks in the U.S. and Europe during the period from 2001 to 2009. The results show that banks with weaker structural liquidity and higher leverage in the pre-crisis period were more likely to fail afterward. The likelihood of bank failure also increases with bank risk-taking.

There should be adequacy of liquidity sources compared to present and future needs, and availability of assets readily convertible to cash without undue loss. The fund management practices should ensure an institution is able to maintain a level of liquidity sufficient to meet its financial obligations in a timely manner; and capable of quickly liquidating assets with minimal loss. (Uniform Financial Institutions Rating System 1997, p. 8).

Rudolf (2009) emphasizes that “the liquidity expresses the degree to which a bank is capable of fulfilling its respective obligations”. Banks makes money by mobilizing short-term deposits at lower interest rate, and lending or investing these funds in long-term at higher rates, so it is hazardous for banks mismatching their lending interest rate.
2.8 Theoretical framework

Most researchers while carrying out studies on bank performance employ different models in the context of the theories discussed above. The section below surveys some of the empirical studies on bank performance.

This study uses the CAMEL model of bank performance measurement. The model involves the use of financial ratios in measuring bank performance. Compared to the other models, the CAMEL model is arguably the most popular framework used by regulators for bank performance evaluation (Naceur, 2003; Heffernan & Fu, 2008; Sufian&Habibullah, 2010; Al-Tamimi, 2010; Khrawish, 2011; Kouser & Saba, 2012). Apart from being the most used method for evaluating bank performance, the CAMEL is also a contemporary model of financial analysis and the most recent innovation in the financial performance evaluation of banks (Sangmi & Nazir, 2010). The model assesses bank performance based on capital adequacy, asset quality, management competency and soundness, earnings and liquidity. The likelihood of bank failure is increased if any of these factors show signs of inadequacy. Financial ratios such as return on assets (ROA), return on equity (ROE), and net interest margin (NIM) form part of the financial ratios that the CAMEL model uses.

It is important to mention that the complexity of both the AHP and DEA method of performance evaluation places the CAMEL model at the very pole position as a model of choice for evaluating bank performance. The CAMEL model derives its strength from its simplicity. Different financial ratios are selected as proxies for the five dimensions of the CAMEL.
2.9 Conceptual framework

Figure 2.1: Conceptual framework

Independent Variable

<table>
<thead>
<tr>
<th>Capital Adequacy</th>
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<tr>
<td>• Capital Adequacy Ratio (CAR)</td>
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<tr>
<td>• Debt-Equity Ratio</td>
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<td>• Core Capital Ratio</td>
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<th>Asset quality</th>
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<td>• Gross NPA to Total Advances</td>
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<tr>
<td>• Loan Loss Coverage Ratio</td>
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<tr>
<td>• Loan Loss Provision Ratio</td>
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<tr>
<th>Management capability</th>
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<tbody>
<tr>
<td>• Expenditure to Income</td>
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<td>• Ratio Business per Employee</td>
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<td>• Profits per employee</td>
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<th>Earnings</th>
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<td>• Return on Assets(ROA)</td>
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<tr>
<td>• Earning per shares</td>
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<td>• Return on Equity (ROE)</td>
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<th>Liquidity management</th>
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<td>• Liquid Assets to Total Assets</td>
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<td>• Cash Deposit Ratio</td>
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<td>• Credit Deposit Ratio</td>
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<th>Moderating Variables</th>
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<tr>
<td>• Government Policy</td>
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<td>• Regulator(SASRA)</td>
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<td>• politics.</td>
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<th>Financial performance of Deposit Taking SACCOs</th>
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<tr>
<td>• Level of compliance</td>
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<td>• Profitability</td>
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<td>• Dividend rate</td>
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2.10 Knowledge gap

CAMEL is a ratio-based model used to evaluate the performance of banks with the help of different criteria, viz. Capital Adequacy, Asset Quality, Management Quality, Earnings and Liquidity. SASRA adopted this model in 2012 to rate DTS. Is it a practical and effective means considering that SACCOS are an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise and more so the set up of banks is different from that of SACCOs.

Other scholars have carried out many studies and it is evident that factors contributing to success or failure of cooperatives are multifaceted and depends on the operating environment of the specific SACCO. In Kenya, there is paucity of empirical studies on the drivers of financial performance of SACCOs in the sub-sector. This study therefore seeks to Evaluate Financial Factors influencing performance of SACCOs programmes in Kisii county, it further seeks to answer the question about which particular component of the CAMEL framework mostly affects performance of SACCOs, their relative order and rank and hopefully by doing this it will assist SACCO authorities and management to formulate policies that can help maximize financial performance. The findings of this study will contribute to existing knowledge and other studies and may be useful in policy formulation.

2.11 Summary of literature review

From the literature review in this chapter it’s noted that CAMEL variables influence the performance of financial institutions. For example, Kabir and Dey (2012) examined the performance Private, Commercial of Bangladesh banks by adopting the CAMEL Model. The author concluded that the central banks of all around the world have improved their supervision quality and techniques. Mishra and Aspal (2013) analyzed the performance of State Bank Group through the help of the CAMEL model in India. They found that though ranking of ratios is different for different banks in the State Bank group. But there is no statistically significant difference between the CAMEL ratios. Based on the above literature, we can say that there are some studies about banks in various countries, however a detailed study has not yet been conducted in deposit taking SACCOs using CAMEL model.
<table>
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<tr>
<th>Research Question</th>
<th>Indicators</th>
<th>Data collection instrument</th>
<th>Measurement</th>
<th>Data Analysis</th>
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</table>
| To what extent does capital adequacy influence a SACCO’s financial performance? | ◆ Capital Adequacy Ratio (CAR)  
◆ Debt-Equity Ratio  
◆ Core Capital Ratio | Questionnaire              | Ratio               | ◆ Descriptive statistics (percentages and averages)  
◆ Qualitative analysis  
◆ CAMEL’s Financial Analysis |
| To what extent does asset quality influence a SACCO’s financial performance?      | ◆ Gross NPA to Total Advances  
◆ Loan Loss Coverage Ratio  
◆ Loan Loss Provision Ratio | Questionnaire              | Ratio               | ◆ Descriptive statistics (percentages and averages)  
◆ Qualitative analysis  
◆ CAMEL’s Financial Analysis |
| To what extent does management capability influence a SACCO’s financial performance? | ◆ Expenditure to Income Ratio  
◆ Business per Employee  
◆ Profits per employee | Questionnaire              | Ratio               | ◆ Descriptive statistics (percentages and averages)  
◆ Qualitative analysis  
◆ CAMEL’s Financial Analysis |
| To what extent do earnings influence a SACCO’s financial performance? | ♦ Return on Assets (ROA) ♦ Earning per shares ♦ Return on Equity (ROE) | Questionnaire Ratio | ♦ Descriptive statistics (percentages and averages) ♦ Qualitative analysis ♦ CAMEL’s Financial Analysis |
| To what extent does liquidity management influence a SACCO’s financial performance? | ♦ Liquid Assets to Total Assets ♦ Cash Deposit Ratio ♦ Credit Deposit Ratio | Questionnaire Ratio | ♦ Descriptive statistics (percentages and averages) ♦ Qualitative analysis ♦ CAMEL’s Financial Analysis |
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter contains a discussion of various components of the research methodology as was applied in the study. These include research design, target population, sampling procedures and sample size, methods of data collection. The chapter further provides the methods of data analysis.

3.2 Research Design
The research used a descriptive research design. Descriptive survey research portrays an accurate profile of persons, events, or account of the characteristics, for example behavior, opinions, abilities, beliefs, and knowledge of a particular individual, situation or group (Burns and Grove 2003). The descriptive survey method was preferred because it would ensure complete description of the situation (in depth study of factors influencing financial performance of DTS in Kisii County, Kenya), making sure that there is minimum bias in the collection of data. The researcher selected Five DTS in Kisii County namely; ABC, DEF, GHI, JKLMNO. The period for evaluating performance through CAMELS model in this study is five years i.e 2010 to 2015.

The main focus of this study was quantitative. However some qualitative approach was used in order to gain a better understanding and possibly enable a better and more insightful interpretation of the results from the quantitative study.

3.3 Target Population
Target population in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well defined or set of people, services, elements, events, group of things or households that are being investigated. This definition ensures that the population of interest is homogeneous. And by population the researcher means the complete census of the sampling frames. Population studies also called census are more representative because everyone has an equal chance to be included in the final sample that is drawn according to Mugenda and Mugenda (2003).
The total population of SACCOs in Kisii County is 31 which includes 9 deposit taking SACCOs and the rest are non deposit taking saccos (MOCD, 2012). The research targeted population consisted of all Managers of the deposit taking SACCOs licenced by SASRA in Kisii county, Kenya. There were 5 Licenced SACCOs in Kisii County by 2013 (SASRA Review Report, 2013). The target population therefore, under the study was 110 of all the 5-licensed Deposit Taking SACCOs in Kisii County as at the end of 2013 (SASRA review report, 2013).

3.4 Sample size Sampling Technique
The sample size comprised of all managers of DTS in operation as at the end of 2013 in Kisii county except for those that started their operations as DTS in between the study period, and those that were under statutory management during the same period if any. The researcher conducted a census study. According to Cooper & Schindler (2007), a census is feasible when the population is small and necessary when the elements are quite different from each other. When the population is small and variable, any sample we draw may not be representative of the population from which it is drawn. Therefore, for this case, the study was appropriate for researcher to choose census method to be used because the population was small and the institutions were easily assessable to reach. Noting that financial performance impacts the organization as whole (all departments), the researcher targeted all managers across all departments from the selected SACCOs. According to Krejie and Morgan (1970) ‘s table, a sample size of 86 is appropriate for a target population of 110.

3.4.1 Sample Size
The sample size of this study was 86 managers (Krejie and Morgan, 1970) of all the five DTS in Kisii County.

3.4.2 Sampling Technique
The sampling plan describes how the sampling unit, sampling frame, sampling procedures and the sample size for the study will be. The sampling frame described the list of all population units from which the sample was selected (Cooper & Schindler, 2003). A convenient sample of SACCOs was studied. The sample was selected from the list of registered SACCOs operating in Kisii County but considered deposit-taking SACCOs licenced by SASRA (SASRA review report, 2013).
3.5 Data Collection Instruments
Primary data was obtained through self-administered questionnaires with closed and open-ended questions (see appendix I). As much as possible, a 5-point scale was used. The questionnaires included structured and unstructured questions and were administered through drop and pick method to respondents who are the CEOs of the DTS. The closed ended questions assisted the researcher to collect quantitative data while open-ended questions enabled the researcher to collect qualitative data. Quantitative data was obtained from the DTS’ balance sheets, profit and loss statements and also taking personal visit to the employees of the DTS.

The study used also secondary data constituting the income statements and balance sheet sourced from the SACCOs audited annual reports and financial statements for the five year period, between 2010 to 2014, available from the SASRA annual review reports and Internet. The period was chosen because it offered recent time series observations and it constitutes a period of major developments in the Sacco sub sector when SASRA adopted the CAMEL model.

3.5.1 Pilot testing of the instruments
A pilot study was conducted to test the accuracy of the instruments. This was done before the actual fieldwork. This involved managers of two non-DTS, which are in Kisii County and one DTS in the neighboring Nyamira County. The reason for the pilot study I was to test questions. Some questions may be vague sensitive, instructive or difficult hence may not have elicited the wanted responses, or worse still, they may have elicited no responses at all. Such questions were changed. The pilot study also gave an estimated time that it will take to complete one instrument.

3.5.2 Validity of the instruments
Validity deals with how accurate the instrument represent the variables of the study. If a method is valid then differences in results between individuals or groups or organizations can be taken as representing true differences in the characteristics under study (ibid). Content validity of a measuring instrument is the extent to which it provides adequate coverage of investigative questions guiding the study. The researcher used the experts to look at every question in the questionnaire and made appropriate recommendations, which were taken into improving the instrument.
3.5.3 Reliability of the instruments
Reliability is a measure of the degree to which research instrument yields consistent results or data after repeated trials. Reliability in research is influenced by random error (Mugenda & Mugenda, 2003). The researcher used split half technique of assessing reliability. Scores from one part were correlated with scores from the second part thus eliminating chance of error due to differing test conditions.

3.6 Data Collection procedure
This research used both qualitative and quantitative data. The researcher obtained a transmittal letter from the University of Nairobi, offering the researcher authority and permission to carry out the research. The researcher made an appointment with managerss of the SACCOs he visited in their offices. The researcher presented the letter of introduction to the respondents to introduce the research as well as verify that the study is for academic purposes only. The researcher left the managers with the questionnaires to give them enough time to fill the questionnaire and collected them within 24 hours.

3.7 Data Analysis Technique
Before processing the responses, the completed questionnaires were edited for completeness and consistency. The data was then coded to enable the responses to be grouped into various categories. A descriptive analysis was employed. Descriptive statistics was used to summarize the data. This included percentages and frequencies. All quantitative data was measured in real values by normalizing. CAMEL’s ratio analysis was used to measure the quantitative data, which was analyzed using the Excel.

3.8 Ethical consideration
The researcher ensured that the three principles of ethics were observed. These included respect, beneficence and justice. Respect and protection of autonomy, rights and dignity of participants was guaranteed throughout the research period. The conduct of research was fair; honest and in a transparent way and the researcher presented findings and interpretations honestly and
objectively. Throughout the study the researcher ensured confidentiality of respondents is safeguarded. Informed consent was obtained from the respondents to ensure voluntary participation. This study also adhered to the principles of research and the research findings which were solely for academic purposes.
CHAPTER FOUR
DATA ANALYSIS, PRESENTATIONS, INTERPRETATIONS, DISCUSSION

4.1 Introduction
This chapter deals with the presentation and analysis of data collected from different sources with the focus on the CAMELS components. As stated in the theoretical prescription, the financial performance analysis of DTS in Kisii County are concentrated in the five components of CAMELS i.e. Capital Adequacy, Assets Quality, Management Quality, Earning Quality, Liquidity and Sensitivity to risk. The data collected from annual reports of respective banks have been analyzed with the application of camel.

The data collected from different sources has been defined and documented in Excel tables, which are further processed to analyze and arrive at the findings on the financial conditions of above mentioned five DTS in terms of Camel Analysis. The major findings of the study on financial performance of the five DTS are also described on each section and part of CAMEL Analysis.

4.2 Questionnaire return rate
With regard to the sample design a total of 110 respondents were targeted, 80% of the respondents gave back their questionnaires. This was achieved because most of the questionnaires were self-administered and some of the managers were on leave and some attended some courses outside their offices.

4.3 Background information
In this section the researcher sought to find out the personal characteristics of respondents who took part in the study; this include information such as gender, age, marital status, years worked in the current position and highest academic qualification attained.

Majority of the respondents (80%)were male CEOs whereas 20% of the respondents were female CEOs, this is an indication that both genders were involved in the study.
4.3.1 Age
Most of the respondents (56%) were aged between 36 and 50 years whereas 5% of the respondents were aged 51 and above years and the rest 39% were youths aged 21 to 35 years, this is an indication that all age brackets were involved in the study.

Table 4.1 Respondents’ age

<table>
<thead>
<tr>
<th>Age bracket (Years)</th>
<th>Frequency</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>21-25</td>
<td>5</td>
<td>6%</td>
</tr>
<tr>
<td>26-30</td>
<td>16</td>
<td>18%</td>
</tr>
<tr>
<td>31-35</td>
<td>14</td>
<td>16%</td>
</tr>
<tr>
<td>36-40</td>
<td>18</td>
<td>20%</td>
</tr>
<tr>
<td>41-45</td>
<td>17</td>
<td>19%</td>
</tr>
<tr>
<td>46-50</td>
<td>13</td>
<td>15%</td>
</tr>
<tr>
<td>51 and above</td>
<td>5</td>
<td>6%</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100%</td>
</tr>
</tbody>
</table>

4.3.2 Academic qualification
Majority of the respondents (49%) had Diplomas whereas 37% of the respondents had one or two degrees, the rest 14% had certificates and below. This is an indication that academically qualified respondents were involved in the study.

Table 4.2 Respondents’ academic qualifications

<table>
<thead>
<tr>
<th>Highest Academic qualification</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters</td>
<td>6</td>
<td>7%</td>
</tr>
<tr>
<td>-----------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Under graduate</td>
<td>26</td>
<td>30%</td>
</tr>
<tr>
<td>Diploma</td>
<td>43</td>
<td>49%</td>
</tr>
<tr>
<td>Others</td>
<td>13</td>
<td>14%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>88</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

4.3.3 Length of service

Most of the study respondents (66%) had served their respective DTS for 5 and above years, 16% of the respondents had worked for 3 to 4 years while the rest of the respondents (18%) had worked for 1 to 2 years. This shows that most of the SACCOs retained their employees for a long time.

**Table 4.3 Respondents’ Length of service**

<table>
<thead>
<tr>
<th>Length of service (years)</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>16</td>
<td>18%</td>
</tr>
<tr>
<td>3-4</td>
<td>14</td>
<td>16%</td>
</tr>
<tr>
<td>5-6</td>
<td>27</td>
<td>31%</td>
</tr>
<tr>
<td>7-8</td>
<td>21</td>
<td>24%</td>
</tr>
<tr>
<td>9-Above</td>
<td>10</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>88</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

4.4 Capital adequacy on financial performance of Deposit Taking Saccos

In the volatile economic environment the capital is the only protection that any of the
financial institution can have with them. By using their capital, deposit taking SACCOs can honor their obligations even in a case of financial crises or breakdown. Therefore depositors are keen to know the risk perception of the institute. Capital adequacy decides to a great extent how well a financial institution can cope with the unexpected losses. The following capital adequacy ratios were used to determine the extent to which they influence the performance of selected DTS in Kisii County;

4.4.1 Capital Adequacy Ratio (CAR)
Capital adequacy ratio is a measure of the amount of a bank's capital as a percentage of its risk weighted credit exposure. SASRA recommends a minimum of 10%.

Capital Adequacy Ratio (CAR) = Total Capital Fund / Total Risk Weighted assets * 100%

Table 4.4 Kisii County DTS’ Capital adequacy

<table>
<thead>
<tr>
<th>DTS</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>13.57%</td>
<td>12.32%</td>
<td>11.19%</td>
<td>11.44%</td>
<td>11.20%</td>
</tr>
<tr>
<td>DEF</td>
<td>11.01%</td>
<td>14.52%</td>
<td>12.38%</td>
<td>11.93%</td>
<td>12.52%</td>
</tr>
<tr>
<td>GHI</td>
<td>13.29%</td>
<td>13.54%</td>
<td>12.20%</td>
<td>13.11%</td>
<td>12.42%</td>
</tr>
<tr>
<td>JKL</td>
<td>10.34%</td>
<td>10.91%</td>
<td>9.47%</td>
<td>10.83%</td>
<td>10.72%</td>
</tr>
<tr>
<td>MNO</td>
<td>11.79%</td>
<td>12.83%</td>
<td>10.25%</td>
<td>11.81%</td>
<td>12.42%</td>
</tr>
</tbody>
</table>

As shown in the table 4.1 the Capital Adequacy Ratio of ABC of 13.57% is the highest and JKL of 10.34% is the lowest in 2010; DEF of 14.52% is the highest and JKL of 10.91% is lowest in 2011; DEF of 12.38% is the highest and JKL of 9.47 % is lowest in 2012; GHI of 13.11% is in highest position and JKL of 10.83% is the lowest position in 2013; DEF of 12.52% is the highest and JKL of 10.72% is the lowest in the 2014 among five DTS.

Capital Adequacy Ratio of ABC started by 13.57% in 2010, decreased in 2011 and 2012 thereafter increased in 2013, again slightly decreased in 2014 and reached to 11.20%. Overall,
Capital Adequacy Ratio of ABC decreased.

Similarly, DEF is starting with 11.01% in 2010, then increases in 2011 after that decreases in 2012 and 2013 but at the end slightly increases and reached to 12.52% in 2014. Overall Capital Adequacy Ratio of DEF also is in decreasing trend.

Likewise, Capital Adequacy Ratio of GHI starts with 13.29% in 2010 and slightly increases in 2011 after that decreases in 2012 and again increases in 2013 and then in 2014 slightly decreases to 12.42%. This also shows the decreasing trend in overall.

On the other hand, Capital Adequacy Ratio of JKL starts with 10.34% in 2010 and slightly increases in 2011 after that decreases in 2012 and again increases in 2013 and then slightly decreases to 10.72% in 2014. This also shows the increasing trend in overall.

Capital Adequacy Ratio of MNO starts with 11.79% in 2010 and slightly increases in 2011 after that decreases in 2012 and again increases in 2013 and then slightly increases to 12.42% in 2014. This also shows the increasing trend in overall.

It is generally observed that all the five DTS met the regulatory minimum CAR of 10.0 per cent. And it therefore meant that in terms of compliance all were doing well with the regulation. But profitability and dividend rate were low in most DTS in the period studied and therefore meant that there was no significant relationship between DTS profitability and capital adequacy ratio.

### 4.4.2 Debt-Equity Ratio

The Debt to Equity Ratio measures how much money a financial institution should safely be able to borrow over long periods of time. Generally, any bank that has a debt to equity ratio of over 40% to 50% should be looked at more carefully to make sure there are no liquidity problems.

Debt- Equity ratio = Borrowings / Shares Capital+Reserves *100%

**Table 4.5 Kisii County DTS’ debt equity ratio**

<table>
<thead>
<tr>
<th>DTS</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
</table>

As shown in the table 4.5, the Debt-Equity Ratio of JKL of 34.3% is the highest and DEF of 0% is the lowest in 2010; ABC of 45.34% is the highest and DEF of 0% is lowest in 2011; MNO of 44.13% is the highest and DEF of 0% is lowest in 2012; ABC of 44.14% is in highest position and DEF of 0% is the lowest position in 2013; GHI of 45.30% is the highest and DEF of 0% is the lowest in the 2014 among five DTS.

As shown in the table Debt equity ratio of ABC started by 23.97% in 2010, increased in 2011 and 2012 thereafter-increased in 2013, again slightly decreased in 2014 and reached to 42.98%. Overall, Debt- equity Ratio of ABC decreased.

Similarly, DEF is not externally financed.

Debt-equity Ratio of GHI starts with 25.53% in 2010 and slightly increases in 2011, 2012 and again increases in 2013 and then in 2014 slightly decreases to 45.3%. This also shows the increasing trend in overall.

On the other hand, Debt-equity Ratio of JKL starts with 34.30% in 2010 and slightly increases in 2011, 2012 and 2013 and then slightly reaches to 407.9% in 2014. This also shows the increasing trend in overall.

Debt-equity Ratio of MNO started with 15.63% in 2010 and slightly increases in 2011 after that decreases in 2012 and again increases in 2013 and then slightly increases to 43.21% in 2014.

It is noted that most of the DTS had gone for external borrowing thereby increasing their debt-equity ratio and on an increasing trend. Further investigation revealed that those DTS that had borrowed were agricultural based and had made low profits and with non or low dividends.
4.4.3 Core Capital Ratio
Core Capital measures a bank’s financial strength from a regulator’s point of view. In the context of SASRA Core or Primary Capital includes Paid-up Capital, Share Premium, Non redeemable Preference Share, General Reserve Fund, Cumulative Profit/loss, Capital Redemption Reserve, Capital Adjustment Fund/Proposed Bonus Share and other Free Reserve. Amount of the goodwill, Fictitious Assets, Investment in excess of prescribe limit and investment in security of companies with financial interest is deducted from the sum of all elements of the primary capital to arrive at the core capital.

Every institution shall, at all times, maintain a core capital of not less than ten per cent of total assets, a core capital of not less than eight per cent of its total deposit liabilities; and an institutional capital of not less than eight per cent of its total assets.

Table 4.6 Kisii County DTS’ Core Capital ratio

<table>
<thead>
<tr>
<th>DTS</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>18.88%</td>
<td>18.21%</td>
<td>17.92%</td>
<td>19.03%</td>
<td>28.21%</td>
</tr>
<tr>
<td>DEF</td>
<td>20.01%</td>
<td>20.71%</td>
<td>19.32%</td>
<td>19.57%</td>
<td>20.51%</td>
</tr>
<tr>
<td>GHI</td>
<td>12.37%</td>
<td>9.94%</td>
<td>9.21%</td>
<td>10.50%</td>
<td>10.48%</td>
</tr>
<tr>
<td>JKL</td>
<td>9.54%</td>
<td>8.06%</td>
<td>7.64%</td>
<td>8.93%</td>
<td>7.72%</td>
</tr>
<tr>
<td>MNO</td>
<td>13.28%</td>
<td>10.74%</td>
<td>11.54%</td>
<td>12.07%</td>
<td>12.75%</td>
</tr>
</tbody>
</table>

Core Capital Ratio = Total core capital fund / Total Risk Weighted Assets *100 %

As shown in the table 4.6 the Core Capital Ratio of DEF of 20.01% is the highest and JKL of 9.54% is the lowest in 2010; DEF of 20.71% is the highest and JKL of 8.06% is lowest in FY 2011; DEF of 19.32% is the highest and JKL of 7.64% is lowest in 2012; Still DEF of 19.57% is highest and JKL 8.93% is the lowest in 2013; ABC of 28.21% is the highest and JKL of 7.72% is the lowest in the 2014 among five DTS.

As shown in the table Core Capital Ratio of ABC started by 18.88% in 2010, decreased there after till 2013 and increases in 2014, and reached to 28.21%. Overall, Core Capital Ratio of ABC increases.
Similarly, Core Capital Ratio of DEF started with 20.01% in 2010, then slightly increases in 2011 after that decreases in 2012, increased there after till 2013 and reached to 20.51% in the 2014. Overall Core Capital Ratio of DEF also is in increasing trend.

Likewise, Core Capital Ratio of GHI started with 10.74% in 2010, decreases in 2011 and 2013 after that increases slightly in 2014 and reached to 10.48%. This also shows the decreasing trend in overall.

Core Capital Ratio of JKL started with 9.54% in 2010, decreases in 2011 and after that increases slightly in 2013 and drops again and reached to 7.72%. This also shows the decreasing trend in overall.

Finally, Core Capital Ratio of MNO started with 13.28% in 2010, increases in 2011, 2013 and 2014 and reached to 12.75%. This also shows the decreasing trend in overall.

It was generally observed that most DTS had met the required core capital ratio but was in a declining trend. It is further revealed in this study that low core capital in the DTS was a cause of less profitability. It is therefore advisable that banks have a responsibility to ensure their capital base is adequate enough to be able to offer loans and other vital financial services to their members.

4.5 Asset quality on financial performance of Deposit Taking SACCOs

The term ‘assets quality’ and its management determines to a great extent the growth and profitability of a firm. This is because, the deteriorating value of assets directly also affects other areas because the loan losses are generally written off against capital. Apart from this it also hampers profitability, as the provision has to be made on Gross NPAs. So at the end of the day quality of assets jeopardizes the earning capacity of the DTS. The following assets quality ratios were used to assess the extent to which they influence the performance of selected DTS in Kisii County;

4.5.1 Gross NPA to Total Advances

This ratio is used to check whether the bank's gross NPAs are increasing quarter on quarter or year on year. If it is, then indicating that the bank is adding a fresh stock of bad loans. It would
mean the financial institution is either not exercising enough caution when offering loans or is too lax in terms of following up with borrowers on timely repayments.

Gross NPA = Gross NPA / Total Advances * 100%

Table 4.7 Kisii County DTS’ Non performing Assets to total Advances

<table>
<thead>
<tr>
<th>DTS</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>11.63%</td>
<td>11.27%</td>
<td>10.80%</td>
<td>11.67%</td>
<td>12.48%</td>
</tr>
<tr>
<td>DEF</td>
<td>9.99%</td>
<td>7.72%</td>
<td>6.51%</td>
<td>7.86%</td>
<td>9.27%</td>
</tr>
<tr>
<td>GHI</td>
<td>13.78%</td>
<td>12.60%</td>
<td>11.11%</td>
<td>11.86%</td>
<td>17.93%</td>
</tr>
<tr>
<td>JKL</td>
<td>20.75%</td>
<td>17.52%</td>
<td>23.64%</td>
<td>25.97%</td>
<td>29.35%</td>
</tr>
<tr>
<td>MNO</td>
<td>18.84%</td>
<td>19.93%</td>
<td>20.86%</td>
<td>22.76%</td>
<td>24.80%</td>
</tr>
</tbody>
</table>

As shown in the table 4.7 the NPA Ratio of JKL of 20.75% is the highest and DEF of 9.99% is the lowest in 2010; MNO of 19.93% is the highest and DEF of 7.72% is lowest in 2011; JKL of 23.64% is the highest and DEF of 6.51% is lowest in 2012; JKL of 25.97% is highest and DEF 7.86% is the lowest in 2013; JKL of 29.35% is the highest and JKL of 9.27% is the lowest in the 2014 among five DTS.

As shown in the table NPA Ratio of ABC started by 11.63% in 2010, decreased there after till 2012 and increases in 2013 and 2014, and reached to 12.48%. Overall, NPA Ratio of ABC increases.

NPA Ratio of DEF started with 9.99% in 2010, then decreases in 2011 and 2012, increased there after till 2013 and reached to 9.27% in the 2014. Overall Core Capital Ratio of DEF is in decreasing trend.

Likewise, NPA Ratio of GHI started with 13.78% in 2010, decreases in 2011 up to 2013 after that increases sharply in 2014 and reached to 17.93%. This shows an increasing trend in overall.

NPA Ratio of JKL started with 20.75% in 2010, decreases in 2011 and after that continued
increasing up to 29.35% in 2014. This also shows an increasing trend in overall.

Finally, NPA Ratio of MNO started with 18.84% in 2010 and continued increasing in 2011, 2012, 2013 and 2014 and reached to 29.35%. This also is an increasing trend in overall.

It was generally observed that the Gross NPA was on an increasing trend in most of the DTS under study and further revealed that they were agriculturally based and their respective profitability were negatively affected.

4.5.2 Loan Loss Coverage Ratio
Loan Loss Coverage Ratio is the relationship between Total Loan Loss Provision and Total Non Performing Loan. It measures the proportion of Total Loan Loss Provision in relation to Total Non Performing Loan. Out of the Total non-Performing if some loans becomes bad or default then that loss to the bank is covered from the Loan Loss Provision Fund. So, from that point of view, higher the loan loss coverage ratio is better for the banks.

\[
\text{Loan Loss Coverage Ratio} = \frac{\text{Total Loan Loss Provision}}{\text{Total Non-Performing loan}} \times 100\%
\]

Where, Total Loan Loss Provision (LLP) = Provision on (Pass Loan + Restructured Loan + Sub Standard Loan + Doubtful Loan + Bad Loan) Total Non-Performing loan (NPL) = Sub Standard Loan + Doubtful Loan + Bad Loan

<table>
<thead>
<tr>
<th>DTS</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>218.48%</td>
<td>259.17%</td>
<td>369.86%</td>
<td>392.73%</td>
<td>192.24%</td>
</tr>
<tr>
<td>DEF</td>
<td>87.35%</td>
<td>112.77%</td>
<td>121.16%</td>
<td>120.34%</td>
<td>156.80%</td>
</tr>
<tr>
<td>GHI</td>
<td>106.59%</td>
<td>137.09%</td>
<td>185.14%</td>
<td>204.40%</td>
<td>183.05%</td>
</tr>
<tr>
<td>JKL</td>
<td>56.76%</td>
<td>75.87%</td>
<td>98.45%</td>
<td>43.90%</td>
<td>134.65%</td>
</tr>
<tr>
<td>MNO</td>
<td>97.54%</td>
<td>123.56%</td>
<td>159.87%</td>
<td>111.54%</td>
<td>102.60%</td>
</tr>
</tbody>
</table>

Table 4.8 Kisii County DTS’ loan coverage ratio

As shown in the table 4.8, the LLC Ratio of ABC of 218.48% is the highest and JKL of 56.76%
is the lowest in 2010; Again ABC of 259.17% is the highest and JKL of 75.87% is lowest in 2011; ABC of 369.86% is the highest and JKL of 98.45% is lowest in 2012; ABC of 392.73% is highest and JKL 43.90% is the lowest in 2013; ABC of 192.24% is the highest and JKL of 102.60% is the lowest in the 2014 among five DTS.

As shown in the table LLC Ratio of ABC started by 259.17% in 2010 increased there after till 2013 and then dropped in 2014 to 192.24%. Overall, LLC Ratio of ABC decreased.

LLC Ratio of DEF started with 87.35% in 2010, then continued increasing and reached to 156.8% in the 2014. Overall LLC Ratio of DEF is in increasing trend.

Likewise, LLC Ratio of GHI started with 106.59% in 2010, increases in 2011 up to 2013 after that decreases in 2014 and reached 183.05%. This shows an increasing trend in overall.

LLC Ratio of JKL started with 56.76% in 2010, continued increasing up to 2012, then decreased in 2013 and then again started increasing in 2014 to 134.65%. This also shows an increasing trend in overall.

Finally, LLC Ratio of MNO started with 97.54% in 2010 and continued increasing in 2011 and 2012 then dropped in 2013 and 2014 and reached to 102.60%. This also is an increasing trend in overall.

It was generally observed that the LLC was on an increasing trend in most of the DTS under study and further revealed that they were agriculturally based and their respective profitability were negatively affected.

4.5.3 Loan Loss Provision Ratio
Loan loss provision is the sum of amount that banks are required to set or kept for potential loan loss. Loan loss provision is deductible expenses. It is deducted from interest income. It is a provision set by a bank to cover unpredictable loss caused due to default of the loan amount. This ratio shows how much the bank needs to set the provision to cover the loss of default loan in the future from the loan released by the bank. Lower the loan loss provision significant that the bank has higher volume of good loan and higher non-performing loan. Loan loss provision is
the whole amount of provision set aside to cover the loss then LLP to NPL as NPL is lower we can say that quality of loan is better. But if LLP to TL is higher then we can say that the quality of loan is good but at least we are in safe position as it has more provision for losses from loan.

Loan Loss Provision Ratio = Total Loan Loss Provision (LLP) / Total Loans and advances *100%

**Table 4.9 Kisii County DTS’ loan loss provision ratio**

<table>
<thead>
<tr>
<th>DTS</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>3.56%</td>
<td>3.30%</td>
<td>2.97%</td>
<td>2.64%</td>
<td>0.93%</td>
</tr>
<tr>
<td>DEF</td>
<td>4.36%</td>
<td>3.07%</td>
<td>3.04%</td>
<td>2.24%</td>
<td>2%</td>
</tr>
<tr>
<td>GHI</td>
<td>4.03%</td>
<td>3.57%</td>
<td>2.05%</td>
<td>1.75%</td>
<td>1.70%</td>
</tr>
<tr>
<td>JKL</td>
<td>2.93%</td>
<td>2.75%</td>
<td>1.35%</td>
<td>1.25%</td>
<td>0.45%</td>
</tr>
<tr>
<td>MNO</td>
<td>3.30%</td>
<td>2.67%</td>
<td>1.07%</td>
<td>0.97%</td>
<td>0.76%</td>
</tr>
</tbody>
</table>

As shown in the table 4.9 the LLP Ratio of DEF of 4.36% is the highest and JKL of 2.93% is the lowest in 2010; Then GHI of 3.57% is the highest and MNO of 2.67% is lowest in 2011; DEF of 3.04% is the highest and JKL of 1.07% is lowest in 2012; ABC of 2.64% is highest and MNO 0.97% is the lowest in 2013; DEF of 2% is the highest and JKL of 0.45% is the lowest in the 2014 among five DTS.

As shown in the table LLP Ratio of ABC started by 3.56% in 2010 decreased there after till 2014 0.93%. Overall, LLP Ratio of ABC decreased.

LLP Ratio of DEF started with 4.36% in 2010, then continued decreasing and reached to 2% in the 2014. Overall LLP Ratio of DEF is in decreasing trend.

Likewise, LLP Ratio of GHI started with 4.03% in 2010, then continued decreasing and reached to 1.7% in the 2014. This shows also a decreasing trend in overall.

LLP Ratio of JKL started with 2.93% in 2010, then continued decreasing and reached to 0.45%
in the 2014. This also shows a decreasing trend in overall.

Finally, LLP Ratio of MNO started with 3.3% in 2010 and then continued decreasing and reached to 0.76% in the 2014. This also is a decreasing trend in overall.

It was generally observed that the LLP was on an decreasing trend in most of the DTS under study but their respective profitability were negatively affected.

4.6 Management ability on financial performance of DTS
Sound management is one of the most important factors behind Performance of any financial institution. Management efficiency of DTS includes its administrative ability to react in diverse circumstances. The term management efficiency involves the capability of management in generating business and in maximizing profits. To analyze the possible dynamics of management efficiency affecting the financial performance of the DTS, the following ratios were used to investigate the extent to which they influence the performance of selected DTS in Kisii County;

4.6.1 Expenditure to Income Ratio
This ratio measures the efficiency of the institutions’ operations. It demonstrates the amount of expenses it incurs in generating its income. A lower ratio means the institution is more efficient.

Also known as operating expense ratio (OER) = Total expenses / Total Income * 100%

Table 4.10 Kisii County DTS’ expenditure to income ratio

<table>
<thead>
<tr>
<th>DTS</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>71.32%</td>
<td>61.59%</td>
<td>81.92%</td>
<td>85.61%</td>
<td>73.66%</td>
</tr>
<tr>
<td>DEF</td>
<td>57.81%</td>
<td>52.30%</td>
<td>42.31%</td>
<td>66.36%</td>
<td>47.76%</td>
</tr>
<tr>
<td>GHI</td>
<td>91.92%</td>
<td>83.16%</td>
<td>82.51%</td>
<td>92.97%</td>
<td>83.60%</td>
</tr>
<tr>
<td>JKL</td>
<td>88.75%</td>
<td>85.29%</td>
<td>90.24%</td>
<td>81.74%</td>
<td>92.15%</td>
</tr>
<tr>
<td>MNO</td>
<td>91.54%</td>
<td>91.62%</td>
<td>80.43%</td>
<td>87.92%</td>
<td>97.84%</td>
</tr>
</tbody>
</table>

As shown in the table 4.10 the OER of GHI of 91.92% is the highest and DEF of 57.81% is the
lowest in 2010; Then MNO of 91.62% is the highest and DEF of 52.30% is lowest in 2011; JKL of 90.24% is the highest and DEF of 42.31% is lowest in 2012; GHI of 92.97% is highest and DEF’s 66.36% is the lowest in 2013; MNO of 97.84% is the highest and DEF of 47.76% is the lowest in the 2014 among the five DTS under study.

As shown in the table OER of ABC started by 71.32% in 2010 decreased in 2011 and then increased in 2012 and 2013, thereafter decreased to 73.66%. Overall, OER of ABC increased.

OER of DEF started with 57.81% in 2010, and then continued decreasing in 2011 and 2012; in 2013 it increased and finally dropped in 2014 to 47.76%. Overall OER of DEF is in decreasing trend.

Likewise, OER of GHI started with 91.92% in 2010 and then decreased in 2011 and 2012 and in 2013 slightly increased and finally decreased and reached to 92.15% in the 2014. This shows also a slightly increasing trend in overall.

OER of JKL started with 88.75% in 2010, then decreased in 2011, slightly increased in 2012 and in 2013 increased slightly and reached to 92.15% in the 2014. This also shows an increasing trend in overall.

Finally, OER of MNO started with 91.92% in 2010 and then continued decreasing in 2011 and 2013 and then increased and reached to 97.84% in the 2014. This also is an increasing trend in overall.

It was generally observed that the OER of most of the DTS was high and on an increasing trend. It therefore meant that they were not making enough income and expenses were high.

4.6.2 Business per Employee
Revenue per employee is a measure of how efficiently a particular financial institution is utilizing its employees. Ideally, a bank wants the highest business per employee possible, as it denotes higher productivity. In general, rising revenue per employee is a positive sign that suggests the bank is finding ways to squeeze more sales/revenues out of each of its employee.
Business per Employee = Total Income/ Number of Employees

Table 4.11 Kisii County DTS’ business to employee in KSH.

As shown in the table 4.11, the BER of DEF of 415,963 is the highest and JKL of 236,243 is the lowest in 2010; Then DEF of 443,732 is the highest and MNO of 215,097 is lowest in 2011; DEF of 565,849 is the highest and MNO of 223,805 is lowest in 2012; DEF of 526,915 is highest and JKL’s 215,721 is the lowest in 2013; DEF of 544,243 is the highest and MNO of 217,448 is the lowest in the 2014 among the five DTS under study.

As shown in the table BER of ABC started with 394,532 in 2010 decreased in 2011 and then increased in 2012 and 2013, thereafter decreased to 375,887 Overall, BER of ABC decreased.

BER of DEF started with 415,963 in 2010, and then continued increasing in 2011 and 2012; in 2013 it decreased and finally slightly increased in 2014 to 544,243. Overall BER of DEF is in increasing trend.

Likewise, BER of GHI started with 275,461 in 2010 and then increased in 2011 and 2012 increased slightly and in 2013 slightly increased and finally decreased and reached to 235,682 in the 2014. This shows also a slightly decreasing trend in overall.

BER of JKL started with 236,243 in 2010, then increased in 2011, slightly decreased in 2012 and in 2013; increased slightly and reached to 227,875 in the 2014. This also shows a decreasing trend in overall.
Finally, BER of MNO started with 243,641 in 2010 and then decreased in 2011 and then increased in 2013; and then slightly decreased and reached to 217,448 in the 2014. This is a decreasing trend in overall.

It was generally observed that the BER of most of the DTS was low and on a decreasing trend. It therefore meant that they were not utilizing fully their employees in generating more income.

**4.6.3 Profits per employee**

Profit per employee is a measure of how efficiently a particular bank is utilizing its employees. Ideally, a bank wants the highest profit per employee. The success of any institution depends on the competency of its management. In fact, the management not only makes suitable policy and the business plans but also implements them for the short term and the long term interests, which helps to achieve aimed objectives of bank and financial institution's. It is evaluated by checking the effectiveness of the board of directors, the management, manpower and the officials, operating expenditure, customer's relation with the officials and institution, management information system, organization and working method, internal control system, power concentration, monitoring, decision making process, policies.

Also known as Management efficiency Ratio (MER) = Net profit after tax / Total no. of staffs

| Table 4.12 Kisii County DTS’ profits per employee in KSH |
|----------------|----------------|----------------|----------------|----------------|----------------|
| DTS            | 2010           | 2011           | 2012           | 2013           | 2014           |
| ABC            | 194,532        | 125,461        | 154,222        | 157,941        | 175,887        |
| DEF            | 215,963        | 243,732        | 265,849        | 326,915        | 344,243        |
| GHI            | 75,461         | 81,853         | 38,492         | 47,664         | 35,682         |
| JKL            | 36,243         | 65,941         | 43,235         | 15,721         | 27,875         |
| MNO            | 43,641         | 15,097         | 23,805         | 35,024         | 17,448         |

As shown in the table 4.12, the MER of DEF of 215,963 is the highest and JKL of 36,243 is the lowest in 2010; Then DEF of 243,732 is the highest and MNO of 15,097 is lowest in 2011; DEF of 265,849 is the highest and MNO of 23,805 is lowest in 2012; DEF of 326,915 is highest and
JKL’s 15,721 is the lowest in 2013; DEF of 344,243 is the highest and MNO of 17,448 is the lowest in the 2014 among the five DTS under study.

As shown in the table MER of ABC started with 194,532 in 2010 decreased in 2011 and then increased in 2012 and 2013, and continued to increase to 175,887 Overall, MER of ABC decreased.

MER of DEF started with 215,963 in 2010, and then continued increasing up to 2014 to 344,243. Overall MER of DEF is in increasing trend.

Likewise, MER of GHI started with 75,461 in 2010 and then increased in 2011 and 2012 decreased slightly and same in 2013 and finally decreased and reached to 35,682 in the 2014. This shows a decreasing trend in overall.

MER of JKL started with 36,243 in 2010, then increased in 2011,slightly decreased in 2012 and in 2013; increased slightly and reached to 27,875 in the 2014. This also shows a decreasing trend in overall.

Finally, MER of MNO started with 43,641 in 2010 and then decreased in 2011 and then increased in 2013; and then slightly decreased and reached to 17,448 in the 2014. This is a decreasing trend in overall.

It was generally observed that the MER of most of the DTS was low and on a decreasing trend. It therefore meant that they were not utilizing fully their employees in generating more income. From the study the level of education staff is low and therefore there is need of capacity building

4.7 Earning on Financial performance of Deposit Taking Saccos

This parameter lays importance on how a financial institution earns its profits. The quality of earning is very important decisive factor that determines the ability of a DTS to earn consistently. It basically determines the profitability of the financial Institution. It also explains the sustainability and growth in earnings in the future. The following earning ratios were used to identify the extent to which they influence the performance of selected DTS in Kisii County;
4.7.1 Return on Asset (ROA)

Return on Asset Ratio shows how much return financial Institution can get from their total asset. Higher the ratio is good for the FI, because if ratio is higher than we can say that the return of bank is high.

Return on Assets Ratio is a key profitability ratio which measures bank’s efficiency in using its assets to generate net income.

\[
\text{Return on Assets} = \frac{\text{Net profit After tax}}{\text{Total Assets}} \times 100\%
\]

Table 4.13 Kisii County DTS’ Return on assets

<table>
<thead>
<tr>
<th>DTS</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>1.43%</td>
<td>1.49%</td>
<td>1.38%</td>
<td>1.66%</td>
<td>1.73%</td>
</tr>
<tr>
<td>DEF</td>
<td>1.41%</td>
<td>1.65%</td>
<td>1.80%</td>
<td>2.04%</td>
<td>2.25%</td>
</tr>
<tr>
<td>GHI</td>
<td>1.51%</td>
<td>0.93%</td>
<td>1.36%</td>
<td>1.60%</td>
<td>1.69%</td>
</tr>
<tr>
<td>JKL</td>
<td>1.08%</td>
<td>1.29%</td>
<td>0.94%</td>
<td>0.96%</td>
<td>0.55%</td>
</tr>
<tr>
<td>MNO</td>
<td>0.78%</td>
<td>0.87%</td>
<td>0.55%</td>
<td>0.80%</td>
<td>0.54%</td>
</tr>
</tbody>
</table>

As shown in the table 4.13, the ROA of GHI of 1.51% is the highest and MNO of 0.78% is the lowest in 2010; Then DEF of 1.65% is the highest and MNO of 0.87% is lowest in 2011; DEF of 1.80% is the highest and MNO of 0.55% is lowest in 2012; DEF of 2.04% is highest and MNO’s 0.80% is the lowest in 2013; DEF of 2.25% is the highest and MNO of 0.54% is the lowest in the 2014 among the five DTS under study.

As shown in the table ROA of ABC started with 1.43% in 2010 increased in 2011 and then decreased in 2012 and 2013 it increased, and continued to increase to 1.73% Overall, ROA of ABC is in increasing trend.

ROA of DEF started with 1.41% in 2010, and then gradually continued increasing up to 2014 to 2.25%. Overall ROA of DEF is in increasing trend.

Likewise, ROA of GHI started with 1.51% in 2010 and then decreased in 2011 and in 2012 it
increased steadily and finally reached to 1.69% in the 2014. This shows an increasing trend in overall.

ROA of JKL started with 1.08% in 2010, then increased slightly in 2011, slightly decreased in 2012 and in 2013 increased and finally decreased slightly and reached to 0.55% in the 2014. This also shows a decreasing trend in overall.

Finally, ROA of MNO started with 0.78% in 2010 and then increased in 2011 and then decreased in 2012; and then slightly increased in 2013 and reached to 0.54% in the 2014. This is a decreasing trend in overall.

It was observed that most of the DTS’ ROA was on an increasing trend and therefore means that they are doing well in terms of investments.

4.7.2 Earning per Shares
Dividend payout ratio shows the percentage of profit shared with the shareholders. The more the ratio will increase the goodwill of the bank in the share market.

\[
\text{Earnings per shares ratio} = \frac{\text{Net Profit after tax}}{\text{No of outstanding shares}} \times 100\%
\]

Table 4.14 Kisii County DTS’ Earning per share

<table>
<thead>
<tr>
<th>DTS</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>6%</td>
<td>5%</td>
<td>2%</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>DEF</td>
<td>7.5%</td>
<td>8%</td>
<td>10%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>GHI</td>
<td>5%</td>
<td>10%</td>
<td>3%</td>
<td>0%</td>
<td>1.5%</td>
</tr>
<tr>
<td>JKL</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>MNO</td>
<td>0%</td>
<td>0%</td>
<td>0.5%</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>

As shown in the table 4.14, the earning per share of DEF of 17.5% is the highest and JKL and MNO of 0.0% were the lowest in 2010; Then GHI of 10% is the highest and JKL and MNO of 0.0% is lowest in 2011; DEF of 10% is the highest and JKL of 0.0% is lowest in 2012; DEF of 11% is highest and the rest did not pay dividends in 2013; DEF of 12% is the highest and MNO of 0.0% is the lowest in the 2014 among the five DTS under study.
As shown in the table earning per share of ABC started with 6.0% in 2010 decreased in 2011 and 2012 and then decreased in 2013 and 2014 it increased to 1.73% overall, earning per share of ABC is in decreasing trend.

Earning per share of DEF started with 7.5% in 2010, and then gradually continued increasing up to 2014 to 12%. Overall earning per share of DEF is in increasing trend.

Likewise, earning per share of GHI started with 5% in 2010 and then increased in 2011 and in 2012 it decreased and in 2013 it was 0% and finally reached to 1.5% in the 2014. This shows a decreasing trend in overall.

Earning per share of JKL was zero throughout the study period.

Finally, earning per share of MNO started with 0% in 2010 and then increased in 2012 and then increased in 2014. This is an increasing trend in overall.

It was observed that most of the DTS’ earning per share was on a decreasing trend and therefore means that they are not ‘doing well in terms of profitability.

4.7.3 Return on Equity (ROE)
Return on Equity Ratio is a key profitability ratio for investors, which measure the profitability of shareholders’ investments.

\[
\text{Return on Equity (ROE)} = \frac{\text{Net Income After tax}}{\text{Total shareholders funds}} \times 100\%
\]

<table>
<thead>
<tr>
<th>DTS</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>4.93%</td>
<td>5.67%</td>
<td>3.60%</td>
<td>3.75%</td>
<td>2.29%</td>
</tr>
<tr>
<td>DEF</td>
<td>3.45%</td>
<td>3.79%</td>
<td>2.61%</td>
<td>3.53%</td>
<td>2.60%</td>
</tr>
<tr>
<td>GHI</td>
<td>3.62%</td>
<td>3.42%</td>
<td>3.15%</td>
<td>2.54%</td>
<td>2.90%</td>
</tr>
<tr>
<td>JKL</td>
<td>1.57%</td>
<td>2.25%</td>
<td>1.96%</td>
<td>1.54%</td>
<td>0.61%</td>
</tr>
</tbody>
</table>
As shown in the table 4.15, the ROE of ABC of 4.93% is the highest and JKL of 1.57% were the lowest in 2010; Then ABC of 5.67% is the highest and MNO of 1.92% is lowest in 2011; ABC of 3.60% is the highest and MNO of 0.49% is lowest in 2012; ABC of 3.75% MNO was the lowest in 2013; GHI of 2.90% is the highest and JKL of 0.61% is the lowest in the 2014 among the five DTS under study.

As shown in the table ROE of ABC started with 4.93% in 2010 increased in 2011 and dropped in 2012 and 2013 then decreased further in 2014 to 2.29% overall, ROE of ABC is in decreasing trend.

ROE of DEF started with 3.45% in 2010 and then increased in 2011 and in 2012 it decreased and in 2013 it increased and finally dropped to 2.60% in the 2014. This shows a decreasing trend in overall.

Likewise, ROE of GHI started with 3.62% in 2010 and then decreased in 2011, 2012 and 2013 it decreased continuously and finally slightly increased to 2.90% in the 2014. This shows a decreasing trend in overall.

ROE of JKL started with 1.57% in 2010, then increased in 2011, dropped again in 2012, still continued to drop afterwards to 0.61% in 2014 in the study period. This shows a decreasing trend in overall.

Finally, ROE of MNO started with 1.80% in 2010, then increased in 2011 but dropped afterwards to 0.78% in 2014 in the study period. This shows a decreasing trend in overall.

It was observed that most of the DTS’ ROE was on an decreasing trend and therefore means that the shareholders can not be encouraged to invest in the DTS because of low returns.

4.8 Liquidity on Financial performance of DTS
Liquidity is the financial institution’s capacity to meet its short-term obligations as well as loan commitments. Liquidity is most important parameter especially in banking sector as
banks are considered as liquidity creator in the market. Therefore, if the liquidity management of a DTS is not proper, it can adversely affect the performance of the deposit taking SACCOs. The following liquidity ratios were used to establish the extent to which they influence the performance of selected DTS in Kisii County;

4.8.1 Liquid Assets to Total Assets

Liquidity Asset to Total Asset = Liquidity asset / Total Asset * 100%

Table 4.16 Kisii County DTS’ Liquid assets to Total assets
Liquidity for a bank means the ability to meet its financial obligations as they come due. Bank lending finances investments in relatively illiquid assets, but it fund its loans with mostly short term liabilities. Thus one of the main challenges to a bank is ensuring its own liquidity under all reasonable conditions.

<table>
<thead>
<tr>
<th>DTS</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>10.40%</td>
<td>11.25%</td>
<td>13.15%</td>
<td>11.13%</td>
<td>18.50%</td>
</tr>
<tr>
<td>DEF</td>
<td>18.25%</td>
<td>16.95%</td>
<td>20.62%</td>
<td>19.10%</td>
<td>20.45%</td>
</tr>
<tr>
<td>GHI</td>
<td>16.19%</td>
<td>8.55%</td>
<td>5.96%</td>
<td>9.11%</td>
<td>9.38%</td>
</tr>
<tr>
<td>JKL</td>
<td>5.45%</td>
<td>6%</td>
<td>5.63%</td>
<td>4.98%</td>
<td>5.08%</td>
</tr>
<tr>
<td>MNO</td>
<td>7.15%</td>
<td>4.73%</td>
<td>5.25%</td>
<td>6.04%</td>
<td>7.63%</td>
</tr>
</tbody>
</table>

As shown in the table 4.16, the liquidity ratio of DEF of 18.25% is the highest and JKL of 5.45% were the lowest in 2010; Then DEF of 16.95% is the highest and MNO of 4.73% is lowest in 2011; DEF of 20.62% is the highest and MNO of 5.25% is lowest in 2012; DEF of 19.10% was the highest and JKL of 4.98% was the lowest in 2013; DEF of 20.45% is the highest and JKL of 5.08% is the lowest in the 2014 among the five DTS under study.

As shown in the table liquidity ratio of ABC started with 10.40% in 2010 increased in 2011 and 2012; and dropped in 2013 and increased further in 2014 to 18.50% overall, liquidity ratio of ABC is in an increasing trend.
Liquidity ratio of DEF started with 18.25% in 2010 and then decreased in 2011 and in 2012 it increased and in 2013 it decreased and finally increased to 20.45% in the 2014. This shows a increasing trend in overall.

Likewise, liquidity ratio of GHI started with 16.19% in 2010 and then decreased in 2011, 2012 and 2013 it increased continuously to 9.38% in the 2014. This shows a decreasing trend in overall.

Liquidity ratio of JKL started with 5.45% in 2010, then increased in 2011, dropped again in 2012, still continued to drop afterwards to 5.08% in 2014 in the study period. This shows a decreasing trend in overall.

Finally, liquidity ratio of MNO started with 7.15% in 2010, then decreased in 2011 and in 2012 it increased continuously afterwards to 7.63% in 2014 in the study period. This shows an increasing trend in overall.

It was observed that most of the DTS’ Liquidity ratio was on an increasing trend and therefore means that they are doing well in terms of meeting short term obligations.

4.8.2 Cash Deposit Ratio
The ratio shows how much part of the deposits invested into the liquidity asset, which can be easily converted into monetary value in the time of need.

\[
\text{Cash deposit ratio} = \frac{\text{Cash}}{\text{Total deposit}} \times 100\%
\]

Table 4.17 Kisii County DTS’ Cash deposit ratio

<table>
<thead>
<tr>
<th>DTS</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>7.40%</td>
<td>8.18%</td>
<td>8.05%</td>
<td>6.99%</td>
<td>7.22%</td>
</tr>
<tr>
<td>DEF</td>
<td>9.77%</td>
<td>6.46%</td>
<td>6.94%</td>
<td>8.29%</td>
<td>6.29%</td>
</tr>
<tr>
<td>GHI</td>
<td>6.91%</td>
<td>5.55%</td>
<td>4.17%</td>
<td>6.17%</td>
<td>7.28%</td>
</tr>
<tr>
<td>JKL</td>
<td>4.47%</td>
<td>3.68%</td>
<td>7.93%</td>
<td>6.45%</td>
<td>7.27%</td>
</tr>
</tbody>
</table>
As shown in the table 4.17, the Cash ratio of DEF of 9.77% is the highest and JKL of 4.47% were the lowest in 2010; Then DEF of 8.18% is the highest and JKL of 3.68% is lowest in 2011; DEF of 8.05% is the highest and GHI of 4.17% is lowest in 2012; DEF of 8.29% was the highest and GHI of 6.17% was the lowest in 2013; GHI of 7.28% is the highest and DEF of 6.29% is the lowest in the 2014 among the five DTS under study.

As shown in the table cash ratio of ABC started with 7.40% in 2010 increased in 2011 and 2012; and dropped in 2013 and increased further in 2014 to 7.22% overall, cash ratio of ABC is in an decreasing trend.

Cash ratio of DEF started with 9.77% in 2010 and then decreased in 2011 and in 2012 and 2013 it increased and finally decreased to 6.29% in the 2014. This shows a decreasing trend in overall.

Likewise, cash ratio of GHI started with 6.91% in 2010 and then decreased in 2011, 2012 and 2013 it increased continuously to 7.28% in the 2014. This shows an increasing trend in overall.

Cash ratio of JKL started with 4.47% in 2010, then decreased in 2011, increased again in 2012, still continued to drop afterwards to 7.27% in 2014 in the study period. This shows a increasing trend in overall.

Finally, cash ratio of MNO started with 5.45% in 2010, then decreased in 2011 and in 2012 it increased continuously afterwards and dropped to 6.73% in 2014 in the study period. This shows an increasing trend in overall.

It was observed that most of the DTS’ Cash ratio was on an increasing trend and therefore means that they are doing well in terms of cash handling.

4.8.3 Credit Deposit Ratio
Credit Deposit Ratio, it is the ratio of how much a bank lends out of the deposits it has mobilised. It indicates how much of a bank's core funds are being used for lending, the main banking activity. The higher the Loan-to-deposit ratio, the more the bank is relying on borrowed funds.
Credit deposit ratio = Total loans / Total deposits *100%

Table 4.18 Kisii County DTS’ credit deposit ratio

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>1.56</td>
<td>2.24</td>
<td>1.27</td>
<td>2.85</td>
<td>2.45</td>
</tr>
<tr>
<td>DEF</td>
<td>-2.75</td>
<td>-3.07</td>
<td>-2.56</td>
<td>-3.75</td>
<td>-4.51</td>
</tr>
<tr>
<td>GHI</td>
<td>0.96</td>
<td>1.74</td>
<td>1.97</td>
<td>1.50</td>
<td>2.75</td>
</tr>
<tr>
<td>JKL</td>
<td>1.25</td>
<td>0.85</td>
<td>1.65</td>
<td>2.14</td>
<td>2.62</td>
</tr>
<tr>
<td>MNO</td>
<td>1.05</td>
<td>1.87</td>
<td>1.54</td>
<td>1.92</td>
<td>2.77</td>
</tr>
</tbody>
</table>

As shown in the table 4.18, the Credit ratio of ABC of 1.56% is the highest and DEF of -2.75% were the lowest in 2010; Then ABC of 2.24% is the highest and DEF of -3.07% is lowest in 2011; GHI of 1.97% is the highest and DEF of -2.56% is lowest in 2012; ABC of 2.85% was the highest and DEF of -3.75% was the lowest in 2013; MNO of 2.77% is the highest and DEF of -4.51% is the lowest in the 2014 among the five DTS under study.

As shown in the table credit ratio of ABC started with 1.56% in 2010 increased in 2011 and 2012 dropped, in 2013 it increased further in 2014 to 2.45% overall, credit ratio of ABC is in an increasing trend.

Credit ratio of DEF started with -2.75% in 2010 and then decreased in 2011 and in 2012 increased, and 2013 it decreased to -4.51% in the 2014. This shows a decreasing trend in overall.

Likewise, credit ratio of GHI started with 0.96% in 2010 and then increased in 2011, 2012 and 2013 it increased dropped and then increased to 2.75% in the 2014. This shows an increasing trend in overall.

Credit ratio of JKL started with 1.25% in 2010, and then still continued to increase afterwards to 2.62% in 2014 in the study period. This shows an increasing trend in overall.

Finally, credit ratio of MNO started with 1.05% in 2010, then increased in 2011 and in 2012 it
dropped and afterwards increased to 2.77% in 2014 in the study period. This shows an increasing trend in overall.

It was observed that most of the DTS’ credit ratio was on an increasing trend and therefore meant that they were not doing well as they depended on borrowed funds.
CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter presents a summary of major issues raised from chapter 1 to chapter 4 and offers conclusions according to the findings of this research. Recommendations in a general discussion are made in light of the objectives and research questions set backed by research results. Further to summary, conclusions and recommendations, the chapter seeks to highlight suggestion of further areas that can be looked by other researchers in future.

5.2 Summary of findings
The key movers of SACCO financial performance like Capital adequacy, Asset quality, management capability, Earnings and Liquidity were used as the variables of this study. DTS in Kisii County were studied for the effects of these variables on their financial performance over the five years period from 2010 to 2014.

In capital adequacy all the five DTS had succeeded in maintaining Capital adequacy at a higher level than the prescribed level by the regulator of 10 per cent. It is very good sign for the DTS to survive and to expand in future. Debt to equity ratio was a challenge to all except DEF that have gone for external borrowing. They are supposed to maintain a maximum debt ratio of 25 per cent and most of them are above this and are in an increasing trend. The most important thing revealed by this study is that capital adequacy is an important factor when it comes to the determination of profitability of deposit – taking SACCOs.

In asset quality Gross NPA ratio has registered increasing trend for all the five DTS during the last five years. But ABC and DEF have been successful during the last five years in managing the level of NPA. Whereas the MNO,JKL and GHI have very sharp increases in NPA. Thus, it indicates that there is need for improvement in the asset quality position of all the five DTS. It was revealed by the study that asset quality affects profitability to a larger extent. Agricultural based DTS especially the small ones were most hit, the higher NPA the Lower the profitability.

In Management Quality, the researcher found that Business per Employee Ratio and Profit per Employee Ratio is increased during the last five years in ABC and DEF but there is not any major change in the other three. The improvement shows the growth of the DTS to small extent
as well as efficiency of the employee, which is very good in both the DTS and they will help the SACCO to grow in future. But more needs to be done in terms of utilization of staff. At the moment most of them have over expanded and have over employed.

In Earnings quality, in terms of ROA ABC, DEF and GHI have shown a steady increase throughout the study period while JKL and MNO have shown a great decrease throughout the study period. Earning per share DEF was doing very well having a steady increase throughout the study period while the rest were struggling by showing a declining trend.

The Liquidity ratios indicated a better liquidity of all the DTS under study. However, ABC and DEF had performed throughout very well, DEF has an edge over in liquidity if compared with each other according to these ratios. They are above the required minimum of 10% but there is need of increasing the ratio.

5.3 Conclusions
Based on the findings, following conclusions have drawn as the concluding framework of the study on CAMEL analysis.

Capital Adequacy Ratio (CAR) reveals that the bank is running with the adequate capital and the capital fund of the DTS is sound and sufficient to meet the operation as per the regulation standard. CAR of all DTS is above the regulation standard of 10%. Core Capital Ratio (CCR) measured in terms of core capital to risk weighted assets is as per regulation standard of 8%. It means the DTS are using adequate amount of the internal sources for the past five years. In this point of view the DTS are financially sound and strong but management should work more to improve this ratio.

The increasing trend of non-performing loans ratio helps to conclude that the DTS is aware of non performing loans and is not adopting the appropriate policies to manage this problem and to increase the quality of assets. The decreasing trend of loan loss coverage ratio shows that the DTS are not taking appropriate recovery policy. The increasing trend of loan loss provision ratio indicates that the quality of loans becoming poor year by year. It seems that amount of non performing loans and possibility of default in future is increasing.

The management efficiency ratio depicts efficiencies and productivity as a result of well
managed of human resources in terms of profitability but more should be done to reduce costs in order to get more profits.

The decreasing trend of EPS depicts that the return flowing to the DTS’ owner is decreasing. This tendency reflects the weakness of the share in the market is also decreasing. The decreasing trend of ROE shows that the rate of return flowing to the DTS”s shareholders is going down year by year. The increasing trend of ROA concludes that the net income for each unit of assets of the DTS is increasing. This shows that the capability of the management to converting the DTS’ assets into net earning is increasing.

The cash and bank balance to total deposit ratio of all DTS are in fluctuating trend but DEF has the highest among three banks. DEF has highest ratio and presents itself as most secured from the liquidation risk among all five DTS.

The study finds that DTS specific variables by large explain the variation in profitability. High performance is related to the ability of DTS to control their credit risk, diversify their income sources by incorporating non-traditional banking services and control their overhead expenses. In addition, the study finds that DTS’ capital and liquidity status are significant to affect the performance.

5.4 Recommendations and further areas of research
The following recommendations are made based on the conclusions as suggestion to overcome the weakness as regard to financial performance of the five DTS under study in Kisii County

Capital Adequacy Ratio and Core Capital Ratio of all banks are as per regulation standard over the study period but are in fluctuating trend. So recommendation is provide and maintain stable if possible increase core capital fund to increase Capital Adequacy Ratio and Core Capital Ratio. It is also recommended that they should reduce external borrowing to the required standards.

The assets quality ratios of all DTS are in satisfactory level and being poor each year. So, the recommendation is to maintain non performing loan ratio as lower as possible and try to give additional attention in recovering the doubtful and loss loan in future and try to increase its performing loan ratio.
The management efficiency ratio seems to be satisfactory so, the recommendation is that they should increase Net Profit after Tax and should not appoint extra employee in organization and maximally increase staff utilization.

The earning quality ratios of all DTS are recommended that to increase more profit of the DTS should minimize its operating cost by increasing the operating efficiency of its employees.

Liquid assets of the DTS play an important role to meet the day to day and short term obligation. if liquid assets of the DTS are not maintained properly then there is a high probability of DTS going to liquidation. The liquidity ratio of DEF seems to be satisfactory among five DTS but the rest should be careful and try to increase liquidity position by increasing Cash and Bank Balance.

Hence, as a matter of policy implications it’s recommended that:

The Kisii County DTS need to develop their credit risk management capacity- the high level of provision held for poorly performing assets mainly loans and advances is affecting the profitability of DTS. Hence, improving performance require to institute a strong credit risk management system that can efficiently identify bankable borrowers and a system that can monitor their performance after the loan is granted.

In addition, the regulatory framework should support and make sure DTS to have strong credit risk management practice. This can be done though strengthening the internal risk management system to assist the identification, measurement and monitoring of credit risk as well as directing the supervision focus towards credit risk.

Income diversification should also get focus- DTS should divert their attention towards maintaining the proper mix of non-interest bearing assets which can generate fee incomes and their loan exposures. The focus to introduce fee based services which are less exposed to credit risk should be one of the areas that Kisii County DTS need to work for in the future if they need to sustain their profitability performance.

There should also be control over overhead costs- the share of overhead costs (non-interest expense) in the total expense appears to be a significant determinant factor of performance. Therefore DTS should engage themselves in cost control activities like introducing technology.
based banking services and limiting excessive branch expansions, which potentially reduce costs via reducing the number of staff to be employed, and the branch opening costs. This should however be done without compromising the future growth motives of DTS.

Four of the DTS are competing for the same resource and are agricultural rural based. There is need of merging those DTS into one larger DTS for better performance. Large DTS capacity to provide efficient banking services should be the area that needs to be focused on. In addition, the currently observed aggressive move to open branches should be taken care of so as to reduce the negative impact on their performance due to cost increases.
REFERENCES


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SACCO Cap News (2009), Zooming in on governance issues, Newsletter of WOCCU/FSD SACCO Cap Project, Issue 4, January 2009


The United States. Uniform Financial Institutions Rating System 1997, p. 4


APPENDICES

APPENDIX 1: QUESTIONNAIRE

Name (optional):__________________________________________________________

Designation/ Position:____________________________________________________

No. of years in this position:_____________________________________________

SACCO:_______________________________________________________________

Respondent Profile
Age:__________________________

Academic Qualifications:_______________________________________________

Length of Service:_______________________________________________________

Phone/Fax:__________________________

E-mail address:__________________________
Survey Questionnaire on Key Performance Measures used in the evaluation of Deposit Taking SACCOs in Kisii County, Kenya.

**PART-I**

1. What type of performance measures is being used by your DTS as a part of measuring and managing the SACCO’s overall performance?

   - Financial measures
   - Non-financial measures
   - Financial and non-financial measures.

2. Are you aware of the following performance measurement systems?

<table>
<thead>
<tr>
<th>Performance Measurement Systems</th>
<th>To large extent</th>
<th>To some extent</th>
<th>To little extent</th>
<th>Very little extent</th>
<th>Not aware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAMEL Framework</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productivity Measures</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Any Other (Please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-financial Measures</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Customer Perspective</td>
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<td></td>
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</tr>
<tr>
<td>Internal Business Process Perspective</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Learning and Growth perspective</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Any other (Please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. How successfully is the top management is able to align individual objectives with the organizational objectives?

   - To large extent
   - To some extent
   - Little extent
   - Very little extent
   - Not at all.

4. How do you rate the contribution of various intangible assets to the value creation of the SACCOs?
<table>
<thead>
<tr>
<th>Intangible Assets</th>
<th>Most Important</th>
<th>Important</th>
<th>Neither Important Nor Unimportant</th>
<th>Unimportant</th>
<th>Most Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Innovation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Committed and Trained Staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong Work Culture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Image</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any Other (Please specify)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

5. Do you take feedback from different stakeholders (customers, employees, shareholders, management etc.) about various intangible assets (customer satisfaction, customer service, innovation, work culture etc.)?

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>In the Beginning</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Stakeholders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. What are the various channels of getting this feedback?

- Formal channel like survey, reports, etc.
- Informal channel like meetings, discussion, etc.
- Both formal and informal channels.
PART - II
CAMEL Model Measures

7. Rate the following ratios of Capital adequacy in order of their importance (on a scale of 15, where 5 being most important, 4 being important, 3 being neither important nor unimportant, 2 being unimportant and 1 being most unimportant).

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Measures</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Capital Adequacy Ratio (CAR)</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>II.</td>
<td>Debt-Equity Ratio</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>III.</td>
<td>Core Capital Ratio</td>
<td>5 4 3 2 1</td>
</tr>
</tbody>
</table>

For the CEO only fill the following table;

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Capital Adequacy Ratio (CAR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.</td>
<td>Debt-Equity Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.</td>
<td>Core Capital Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Rate the following ratios of Asset quality in order of their importance (on a scale of 15, where 5 being most important, 4 being important, 3 being neither important nor unimportant, 2 being unimportant and 1 being most unimportant).

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Measures</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Gross NPA to Total Assets</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>II.</td>
<td>Loan Loss Coverage Ratio</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>III.</td>
<td>Loan Loss Provision Ratio</td>
<td>5 4 3 2 1</td>
</tr>
</tbody>
</table>

For the CEO only fill the following table;

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Gross NPA to Total Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.</td>
<td>Loan Loss Coverage Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.</td>
<td>Loan Loss Provision Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. Rate the following ratios of Management capability in order of their importance (on a scale of 15, where 5 being most important, 4 being important, 3 being neither important nor unimportant, 2 being unimportant and 1 being most unimportant).

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Measures</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Expenditure to Income</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>II.</td>
<td>Ratio Business per employee</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>III.</td>
<td>Profits per Employee</td>
<td>5 4 3 2 1</td>
</tr>
</tbody>
</table>

For the CEO only fill the following table;

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>I.</td>
<td>Expenditure to Income</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.</td>
<td>Ratio Business per employee</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.</td>
<td>Profits per Employee</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Rate the following ratios of Earnings quality in order of their importance (on a scale of 15, where 5 being most important, 4 being important, 3 being neither important nor unimportant, 2 being unimportant and 1 being most unimportant).

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Measures</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Return on Assets (ROA)</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>II.</td>
<td>Earning per share</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>III.</td>
<td>Return on Equity</td>
<td>5 4 3 2 1</td>
</tr>
</tbody>
</table>

For the CEO only fill the following table;

<table>
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</thead>
<tbody>
<tr>
<td>I.</td>
<td>Return on Assets (ROA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.</td>
<td>Earning per share</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.</td>
<td>Return on Equity</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
11. Rate the following ratios of Liquidity quality in order of their importance (on a scale of 15, where 5 being most important, 4 being important, 3 being neither important nor unimportant, 2 being unimportant and 1 being most unimportant).

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Measures</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Liquidity to Total Assets</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>II.</td>
<td>Cash Deposit Ratio</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>III.</td>
<td>Credit Deposit Ratio</td>
<td>5 4 3 2 1</td>
</tr>
</tbody>
</table>

For the CEO only fill the following table;

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Liquidity to Total Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.</td>
<td>Cash Deposit Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.</td>
<td>Credit Deposit Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Are you satisfied with the present DTS regulations by SASRA on your SACCO in this competitive era?

   o Highly satisfied
   o Satisfied
   o Reasonably satisfied
   o Dissatisfied
   o Can't say

13. How frequently has your SACCO brought changes in the Performance Measurement System with changes in the financial sector and banking industry?.

____________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
14. Name some critical success factors (CSFs) which you must prioritize for your SACCO?

15. Please give the suggestions to improve the performance measurement system of your SACCO to enable it to compete in the globalized environment.

Thanks for your kind co-operation and sparing your precious time.
APPENDIX 2: LETTER OF TRANSMITTAL

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: PERMISSION TO CARRY OUT RESEARCH IN YOUR SACCO
My name is Vincent Mokua Oigo Reg. No. L50/71739/2014 of the University of Nairobi. I am carrying out this research for the partial fulfillment of the requirement for the award of Master of Arts degree in project planning and management of the University of Nairobi. My research shall be based on the investigating the factors influencing performance of deposit-taking savings and credit co-operative societies in Kisii county.
The factors you are going to give is for academic purposes and your identity and information will not be shared with anyone hence will be treated as confidential. Findings of the study shall upon request be availed to you. Thanks.
Yours faithfully,

VINCENT MOKUA OIGO OF THE UNIVERSITY OF NAIROBI
APPENDIX 3: BUDGET

<table>
<thead>
<tr>
<th>ITEM</th>
<th>COST (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report typing printing</td>
<td>20,000</td>
</tr>
<tr>
<td>Photo copying</td>
<td>5,000</td>
</tr>
<tr>
<td>Travelling</td>
<td>20,000</td>
</tr>
<tr>
<td>Computer services</td>
<td>10,000</td>
</tr>
<tr>
<td>Binding</td>
<td>5,000</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>60,000</strong></td>
</tr>
</tbody>
</table>
APPENDIX 4: KISII COUNTY MAP

A map of Kisii county (adopted from Kenya Mpya County maps)