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## RESEARCH ARTICLE

# FACTORS INFLUENCING FINANCIAL PERFORMANCE OF SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN KISUMU COUNTY, KENYA

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#### **ABSTRACT**

Savings and Credit Cooperative Societies (SACCOs) play an essential role in economic development as part of the financial system. In Kenya, 63% of population benefit from SACCOs. SACCOs are now a vital instrument embraced by Kenyan Government towards increasing financial inclusion especially now that financial transactions are tending towards a cashless economy. In light of this, various scholars have conducted studies on financial performance within the SACCO movement and using various variables. However, none of the scholars adopted the CAMELS model in their studies. This study was thus different from the previous ones as it adopted the CAMELS model in evaluating the factors that influence the financial performance of SACCOs measured by the return on asset (ROA). The study was guided by the following research

Objectives: To determine the extent to which capital adequacy influences financial performance of SACCOs in Kisumu County; to evaluate the extent to which asset quality influences financial performance of SACCOs in Kisumu County; to find out how corporate management influences financial performance of SACCOs in Kisumu County and; to examine how liquidity management influences financial performance of SACCOs in Kisumu County. Towards meeting these objectives, the study adopted a survey research design, using 62 managing directors and finance managers at the 31 registered SACCOs in the County that are operational. The sample size of 53 respondents was derived using the Yamane model; pilot testing was done on 6 SACCOs to test reliability and validity of the research tools. In the study, both secondary and primary data were used. While secondary data was obtained from authoritative documentations from the target units, primary data was collected by use of semistructured questionnaires administered to 31 managing directors and 22 finance managers of SACCOs in Kisumu County. Obtained data was analyzed by use of descriptive and inferential statistical techniques. For nonquantitative data, content analysis was adopted. The study results were presented in tabular and chart formats. The study concluded that financial performance of SACCOs in Kisumu County is influenced by capital Adequacy, Asset Quality, management efficiency and Liquidity management. As explained by adjusted R2 of 0.4211% implying that capital adequacy, Asset Quality, and Liquidity Management, holding other factors constant contributed 42.11% of the variation in the Return on Asset. The p-value of 0.05° obtained implied that the regression model was significant in predicting the extent to which Return on Asset is influenced by predictor variables as it was less than α= 0.05. The study established that Capital Adequacy plays a key role in determining the financial performance of SACCOs. With regard to management efficiency the study realized that there was a strong positive correlation with financial performance. The study recommended that the management of the SACCOs to take good care of the Assets as they play a major role in generating the finances. The SACCOs also needed to put in place a proper management team to ensure prudent management of finances.

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## INTRODUCTION

Financial institutions play a vital role in the economic resource allocation of countries. They channel funds from depositors to investors continuously. They can effectively do so, if they generate necessary income to cover their operational cost they incur in the due course. In other words, for sustainable intermediation function, these institutions need to be profitable

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(Aburime, 2005). Beyond the intermediation function, the financial performance has critical implications for economic growth of countries. Good financial performance rewards the shareholders for their investment. This, in turn, encourages additional investment and brings about economic growth. On the other hand, poor financial performance can lead to institutional failure and crisis which have negative repercussions on the economic growth (Flamini *et al.*, 2009). The performance of firms can be affected by internal and external factors. While internal factors are individual characteristics which affect the financial institution's performance, macroeconomic factors are external to the

institutions (Al-Tamimi, 2010). Hansen and Mowen (2005) assert that financial performance is an essential measure to management as it is an outcome which has been achieved by an individual or a group of individuals in an organization related to its authority and responsibility, not against the law, and conforming to the morale and ethic. Such performance is the function of the ability of an organization to gain and manage the economic resources in several different ways to develop competitive advantage. Naser and Mokhtar (2004) contend that high financial performance reflects management effectiveness and efficiency in making use of company's resources, and is often expressed in terms of growth of sales, turnover, employment, or stock prices. According to Thachappilly (2011), financial performance forms important part of the SACCO business and it is crucial for their survival. Successful financial performance in the SACCO has a positive association with the capacity to manage financial issues effectively. Haber and Reichel (2005) provide evidence of a positive association between financially related activities (such as planning and financial control) and the successful financial performance of SACCOs. Mbonyane (2006) sees financial performance as the life blood of small-scale organizations, since without them, no growth decisions can be made. In a country where the financial sector is dominated by SACCOs, any failure in the sub-sector has an immense implication on the economic growth of the country. This is due to the fact that any bankruptcy that could happen in the subsector has a contagion effect that can lead to crises and bring overall financial crisis and economic tribulations (Mboyane,

In Kenya, SACCO comprises over 50% of all cooperatives, and as financial institutions they play a critical role of financial intermediation in the financial landscape focusing mostly on personal development (SACCOs Review, 2012). Generally, the SACCO sub-sector is on the growth regime. For instance, in December 2012, the total assets for the SACCO sub-sector stood at Ksh.216 billion, representing a growth of 11% from the Ksh.194 billion recorded in 2009. During this period, the growth in assets was funded mainly by member deposits and share capital at Ksh.164 billion comparing favourably with loans and advances which accounted for 73% (or Ksh.158 billion) of the total assets. The balance of the funds is financed by retained earnings and loans from commercial banks and other financial institutions (Muchemi, 2005). The SACCOs are found in almost all sectors of the economy and about 80% of the Kenyan population derives their income either directly or indirectly through SACCO initiatives. In practice, SACCOs in Kenya face stiff competition from other players in the financial services sector like commercial banks, micro-finance institutions, shylocks, and investment groups. Out of the approximate population of 41 million, a significant 24.6million people (63%) participate either directly or indirectly in SACCO enterprises (Republic of Kenya, 2013). However, despite the significant government initiative to support cooperative movements through legislation, a significant 3457 (51%) of the SACCOs were not operational. This high failure rate of SACCOs continues to frustrate Millennium Development Goals (MDGs) and Vision 2030 objectives of increasing financial inclusion (Pollet, 2013). Further, due to the high failure of SACCOs, it is estimated that less than 50%

of the target SACCO enterprises are able to participate in SACCO enterprises. Based on these contextual facts, this study examined the significant factors that influence the SACCOs' financial performance, but within the Kisumu County delimitation.

#### **Statement of the Problem**

SACCOs play an essential role in economic development as part of the financial system. In Kenya, 63% of the population is either directly or indirectly benefiting from SACCO activities (Republic of Kenya, 2013). Moreover, SACCOs are now a vital instrument embraced by the Government towards increasing financial inclusion especially now that financial transactions are tending towards a cashless economy. In light of this, various scholars such as Hakelius (2006), Kiaritha (2009), Unal, Guclusoy and Franquesa (2009), Bhuyan (2007), Nyoro and Ngugi (2007), Chombo (2009), Pollet (2009) have conducted studies on financial performance within the SACCO movement and using various variables namely; competition from commercial banks; members' royalty and active participation; financial, organisational, educational factors, membership and legislative support; members satisfaction and members participation; economic factors, management committee and staff members; voice and effective representation of SACCO's respectively as key issues contributing to the financial performance and survival of SACCOs. However, none of these scholars adopted the CAMELS models in their studies. This study was thus different from the previous ones as it adopted the CAMELS models in determining the factors that influence the financial performance of SACCOs in Kisumu County, Kenya.

## **Study Objectives**

The general objective of the study was to investigate the factors influencing financial performance of savings and credit cooperative societies in Kisumu County, Kenya. Specifically, the study was intended to achieve the following objectives:

- To determine the extent to which capital adequacy influences financial performance of SACCOs in Kisumu County;
- To evaluate the extent to which asset quality influences financial performance of SACCOs in Kisumu County;
- To determine how corporate management influences financial performance of SACCOs in Kisumu County; and
- To examine the influence of liquidity management on financial performance of SACCOs in Kisumu County.

#### **Research Questions**

The aforementioned objectives were achieved through answers to the following research questions:

- To what extent does capital adequacy influence the financial performance of SACCOs in Kisumu County?
- To what extent does ownership of quality assets influence the financial performance of SACCOs in Kisumu County?

- How does corporate management influence financial performance of SACCOs in Kisumu County?
- What is the influence of liquidity management on financial performance of SACCOs in Kisumu County?

## Justification of the Study

The fact that 63% of the Kenyan population benefit directly or indirectly from SACCO activities implies that the entities play a significant role which must be nurtured for economic stability. Moreover, by ensuring SACCO stability, the country shall have made milestones towards achieving Millennium Development Goals (MDG) and Vision 2030 objective of increasing financial inclusion. Undertaking this study, therefore, became relevant in the sense that results were to be used by various stakeholders to assess the SACCOs' positioning and inherent challenges. Further, the study was expected to be beneficial to various stakeholders including the Government of Kenya, current and potential investors, members and management of SACCOs, and scholars interested in similar or related areas of study. The Government policy makers will obtain knowledge of the SACCOs' dynamics and thus obtain guidance in designing appropriate practices that will regulate the stakeholders for the purpose of financial stability. The researcher also anticipated that the findings of the study was to help investors in discovering new and better techniques of improving and running their operations in order to improve their financial performance. The SACCO management was to benefit through application of the study's independent audit recommendations. Finally, the study identified the knowledge gaps and provided suggestions for further research to benefit scholars interested in expanding the scope or undertaking related studies.

## Scope of the Study

The study was packaged to analyze institutional factors that influence financial performance of SACCOs in Kisumu County. The specific factors were derived from the CAMELS model and purposively included capital adequacy, assets quality, corporate management, and liquidity management. All these factors were examined as predictor variables to financial performance of SACCOs. Each of these factors and associated implications on financial performance was studied independently, and thereafter a generalization was drawn. Analysis of the study relationship was realized on the basis of both primary and secondary data obtained from 33 active and registered SACCOs in Kisumu County, which was represented by respective managing directors and finance managers due to their spatial advantage to policy development and custody of SACCO records.

## LITERATURE REVIEW

### Introduction

The chapter presents a review of literature relevant to the study's thematic areas. These areas include theoretical review, internal factors affecting financial performance, and empirical review. Moreover, the chapter presents the study's conceptual framework, critiques, summary, and literature gaps. The study

adopted the CAMELS model developed by the USA federal regulators in 1979. The model provides a framework for rating financial condition and performance of individual financial institutions such as banks. Under CAMELS framework, a financial institution's financial performance is rated based on six areas namely, capital adequacy (C), assets quality (A), management efficiency (M), earnings quality (E) and liquidity (L) (Verma, 2003). This study, however, concentrated on capital mobilization and adequacy, asset quality, management, and liquidity. Various previous studies have adopted the model in evaluating financial performance of various financial institutions. A study conducted by Barr et al. (2002) viewed that CAMELS rating criteria has become a concise and indispensable tool for examiners and regulators. This rating criterion ensures a bank's healthy conditions by reviewing different aspects of a bank based on variety of information sources such as financial statement, funding sources, macroeconomic data, budget and cash flow. Said and Saucier (2003) used CAMELS rating methodology to evaluate the liquidity, solvency and efficiency of Japanese Banks, the study evaluated capital adequacy, assets and management quality, earnings ability and liquidity position. Sarker, (2005) in Bangladesh examined the CAMEL model for regulation and supervision of Islamic banks by the central bank. Nurazi and Evans (2005) investigated whether CAMELS ratios could be used to predict bank failure. In Kenya, Ongore (2013) concluded that the financial performance of commercial banks was driven mainly by board and management decisions, while macroeconomic factors have insignificant contribution. The study found that CAMEL scanning helps the bank to diagnose its financial health and alert the bank to take preventive steps for its sustainability.

## **Internal Factors Influencing Financial Performance of SACCOs**

The internal factors are specific variables which influence the financial performance of specific SACCOs. These factors are within the scope of the institutions to manipulate them and that they differ from one SACCO to another. These factors may include capital size, size of deposit liabilities, size and composition of credit portfolio, interest rate policy, labor productivity, and state of information technology, risk level, management quality, bank size, ownership and the like. According to Dang (2011), internal factors can be classified into six using the CAMELS framework: capital adequacy, asset quality, management efficiency, earnings ability, liquidity, and sensitivity to risk. For the purpose of this study, however, four factors were selected which included capital adequacy, asset quality, management efficiency, and liquidity.

## Capital Adequacy

Capital is one of the specific factors that influence the level of financial performance. Capital is the amount of own fund available to support the SACCOs business and act as a buffer in case of adverse situation (Athanasoglou *et al.*, 2005). Financial institutions capital creates liquidity due to the fact that deposits are most fragile and prone to runs. Moreover, greater capital reduces the chance of distress (Diamond, 2000). However, it is not without drawbacks that it induces weak

demand for liability, the cheapest sources of fund Capital adequacy is the level of capital required by the firms 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 debtors. According to Dang (2011), the adequacy of capital is judged on the basis of capital adequacy ratio (CAR). Capital adequacy ratio shows the internal strength of the SACCO to withstand losses during crisis. Capital adequacy ratio is directly proportional to the resilience of the SACCO to crisis situations. It has also a direct effect on financial performance by determining its expansion to risky but profitable ventures or areas (Sangmi and Nazir, 2010).

## Asset Quality

The financial institution's asset is another specific variable that affects its financial performance. The asset includes among others current asset, credit portfolio, fixed asset, and other investments. Often a growing asset (size) is related to the age of the firm (Athanasoglou et al., 2005). More often than not the loan is the major asset that generates the major share of the SACCOs' income. The quality of loan portfolio determines the profitability of SACCO. The loan portfolio quality has a direct bearing on profitability. The highest risk facing a SACCO or any other financial institution is the losses derived from delinquent loans (Dang, 2011). Thus, nonperforming loan ratios are the best proxies for asset quality. It is the major concern of all financial institutions to keep the amount of nonperforming loans to low level. This is so because high nonperforming loan affects the profitability. Thus, low nonperforming loans to total loans shows that the good health of the SACCO portfolio. The lower the ratio, better the financial performance (Sangmi and Nazir, 2010).

## Corporate Management Efficiency

Management efficiency is another important element of CAMEL Model. This element ensures the sound functioning of firms. With increased competition, efficiency and effectiveness have become the rule as firms constantly strive to improve the productivity of their employees (Verma, 2003). Presently it is common to see branches of financial institutions both public and private maintaining extended working hours, flexible time schedules, and outsourcing marketing to attract customers. Another development over the year has been the deployment of technology. Almost all financial institutions have upgraded to computerized system. Internet banking, telephone banking have become widespread and most firms offering these services quite comfortably. The ratios in this segment involved subject analysis to measure the efficiency and effectiveness of management. The management of firms takes crucial decision depending on its risk perfection. It sets vision and goal for the organization and sees that it achieves them. This parameter is used to evaluate management efficiency as to assign premium to better quality and discount poorly managed ones (Dang, 2011).

## Liquidity Management

Liquidity is another factor that determines the level of SACCO financial performance. Liquidity refers to the ability of the firm to fulfill its obligations, mainly of depositors. According to

Dang (2011) adequate level of liquidity is positively related with profitability. The most common financial ratios that reflect the liquidity position of a financial institution are customer deposit to total asset and total loan to customer deposits. Other scholars use different financial ratio to measure liquidity. Ilhomovich (2009) used cash to deposit ratio to measure the liquidity level of firms in Malaysia. However, the study conducted in China and Malaysia found that liquidity level of firms has no relationship with the performances (Said and Tumin, 2011).

## **Empirical Literature**

Al-Tamimi, (2010) investigated factors influencing the performance of Islamic banks and conventional banks in (UAE) during 1996 to 2008. The study resulted that liquidity and concentration were significant determinants of conventional banks performance while cost and number of branches significantly influenced the performance of Islamic banks. Gupta and Sumeet, (2007), in their study used CAMEL Model for evaluating banking sector in India. The study concluded that Indian banks are strong considered to have quality of assets and capital adequacy. Tarawneh, (2006) investigated a comparison of financial performance of Omani's commercial banks using camel model and he work on different measureable relationships between bank's size, asset management, operational efficiency and financial performance. Dash and Das (2010) has analyzed the banking sector of India using camels model the analysis was performed for a sample of fifty-eight banks operating in India, of which twenty-nine were public sector banks, and twenty-nine were private sector/foreign banks. The study covered the financial years 2003-04, 2004-05, 2005-06, 2006-07, and 2007-08. The data for the study consisted of financial variables and financial ratios based on the CAMELS framework. The results show that private banks / foreign banks are better than in the public sector banks, the factors that most studies to reduce the camels. These two factors in order is to improve the performance of private banks / foreign-run and accurate and profitability. The results of the study suggest that public sector banks have to adapt quickly to changing market conditions, in order to compete with private/foreign banks. This is particularly due to the wide difference in their credit policy, customer service, ease of access and adoption of it services in their banking system. Public sector banks must improve their credit lending policies so as to improve asset quality and profitability (Dash and Das, 2010). Hassan and Bashir (2003), in a study on financial and policy indicators influencing the overall performance of Islamic banks, examined in detail the relationship between profitability and the banking characteristics in economic and financial controlled environment. The study is based on bank size and profitability statistics computed from the bank level data. The performance of Islamic bank is computed using the internal characteristics which include bank size, leverage, loans, short term funding, and overheads, while controlling the external factors such as macroeconomic, regulatory and financial market environment. The authors have used regression analysis to find the relationship between profitability and bank characteristics. According to the analysis presented by the authors, higher profitability can be achieved by high leverage and large loans

to asset ratio. Also, favorable macroeconomic conditions impact the performance positively (Hassan and Bashir, 2003). Van der Walt's (2005) study on cooperative failures in Limpopo province indicated that poor management, lack of training, conflict among members (due mainly to poor service delivery), and lack of funds were important contributory factors. Weak institutions, inadequate capital, deficient support systems such as external monitoring and evaluation, and lack of a supportive policy environment have also contributed to cooperative failures (Lyne and Collins, 2008; Zulu, 2007). Dunn et al. (2002) study, which included cooperative managers and directors, voiced concern that owner-directors too often make decisions based on internal politics rather than on sound economics. These participants believed that, on occasion, cooperative directors may be motivated to make decisions that benefit the individual at the expense of the cooperative. In Kenya, several studies have been done on the effect of corporate governance on financial performance. Muriithi (2004) investigated the relationship between corporate governance mechanisms and performance of firms and found that the size and the composition of the board of directors together with the separation of the control and the management have the greatest effect on the performance. Ngugi (2007) did a study on the relationship between corporate governance structures and the performance and found that inside directors are more familiar with the firm's activities and they can act as monitors to top management especially if they perceive the opportunity to advance into positions held by incompetent executives. Mwaura (2005) concluded that actions of top management affect performance. He also recommended that members, when electing office bearers, including delegates, SACCOs should ensure that they elect trustworthy persons. Success and hence performance depends on the calibre of the officials that they elect, among other factors such as capital adequacy, asset quality and management, and liquidity risk mitigation (Mwaura, 2005).

## **Conceptual Framework**

The study's structure is conceived as a functional relationship between a set of four predictor variables, which include capital adequacy, assets quality, management soundness and liquidity management, and financial performance as the dependent variable. The context of the study comprises the 31 SACCOs in Kisumu County.

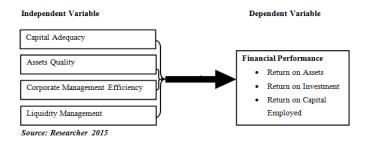


Figure 1. Conceptual Framework

Fig. 1. Illustrates further on the relationship between the study's variables. The model of the concept; FP=f (CA, AQ, CME, LM,) where CA is capital Adequacy, AQ is Asset

Quality, COM is Corporate Management, and LQ is liquidity Management. As illustrated in Fig 1. the relationship between the independent and dependent variables are considered to be moderated by the nature of banking regulatory framework in Kenya. That is, the existing provisions dealing with minimum capital mobilization, regulations in asset ownership and maintenance, corporate management issues such as corporate governance, and liquidity maintenance independently and collectively set the legislative scope within which all SACCOs must be operated and their financial performance determined.

## **Critique of Existing Literature**

Although extensive studies have been done mostly in developed countries on financial performance, the predictor variable options have been divergent and most often than not dissimilar from each other. While there are extensive studies adopting the CAMELS model, none of the previous studies has applied it in the SACCO context and specifically in the developing economy. Notably, literature and data on Kenya's long-term financial performance programs among financial institutions is limited with very little evidence of any studies evaluating the relationship between the six evaluation indicators in the model and financial performance. Therefore, there is knowledge gap in empirical literature review needed to be filled by this research. This study therefore aims to determine the influence of internal factors, derived from the CAMELS model, on financial performance among SACCO in Kisumu County.

## **Summary**

Financial institutions are highly essential in economic development, especially when their financial stability is assured. One set of the core institutions, SACCOs operate under complex and dynamic environment which is unique and specific to the sector. This has contributed to either collapse or deteriorating performance for those survived. This is due to numerous challenges encountered in this volatile environment. Generally, these challenges are caused by economic and macro economic factors like deficiency in contemporary skills, stiff competition from their competitors, economic liberalization and regulation of business. These challenges pose a threat to survival of the SACCO sector and call for better ways of managing and running of the SACCO and this is through innovation. Towards ensuring financial stability, SACCOs need to be guaranteed in their performance through stabilization of performance pillars like capital mobilization, quality asset ownership and management, management soundness, and liquidity efficiency.

## Research Gaps

From the reviewed empirical literature, it was evident that factors contributing to financial performance of SACCOs are multifaceted and depends on the operating environment of the specific economy. Despite this, the review showed gaps owing to few studies directed to addressing the unique SACCO situation in Kenya. Moreover, the studies evaluated just a handful of factors. Their studies were quite general and failed to address financial performance factors for SACCOs. In

Kenya, thus, there is paucity of empirical studies on the drivers of financial performance of SACCOs. This study therefore sought to establish the effect of internal factors influencing financial performance of SACCOs, but within the geographical scope of Kisumu County. The findings of this study will contribute to existing knowledge from other studies and may be useful in relevant policy formulation.

## RESEARCH METHODOLOGY

#### Introduction

This chapter contains components of research methodology that was adopted. They included research design, study population, sampling design, data instruments and procedure, and data processing and analysis.

## Research Design

According to Saunders *et al.* (2009), survey design is a formal or scientific study usually accomplished through the use of a questionnaire that is administered to a sample of the population being studied. Surveys are used when a researcher wants to collect data on phenomena that cannot be directly observed especially where the target population is large. In this study, the researcher used a survey design to carry out the study; the data collected was standardized thus allowed easy comparison.

## **Study Population**

Ngechu, (2004) defines a population as a well defined set of people, services, elements, events, and group of things or households that are being investigated. The population of interest in this study constituted all the 31 SACCOs operating in Kisumu County which have complied with SASRA regulations to remain validly registered. The core respondents were the managing directors and or finance managers since they were more familiar with the subject under study while they are the custodians of corporate financial information. There were thus, a total of 62 participants in the study.

## Sample Size and Sampling Design

Cresswell, (2003) asserts that the entire population may not be easy to study. A researcher therefore has to draw a sample from the population. In this study, Yamane (1967) model, cited by Cresswell (2003), was used to constitute the ultimate sample. According to the Model,

 $n_s = N/1 + N(e^2)$ 

Where;

 $n_s$ -Sample Size N-Population Size e-Precision level (at 0.95 confidence interval, e = 0.05) Given N =62, then;  $n_s = 62/1 + 62(0.05^2)$  =53 study participants

The participants were identified by simple random sampling technique owing to their perceived homogeneity among the study units.

#### **Data Collection Instruments and Procedure**

The study collected both secondary and primary data. The secondary data were collected from sources such as financial statements, management reports, audit reports, and media reports. On the other hand, the primary data were gathered by use of questionnaire. Mark *et al.* (2009) defines a questionnaire as a data collection instrument in which each person is asked to respond to the same set of questions in a pre-determined order. Semi-structured questionnaires were used to obtain data from the respondents for ease of analysis. To be successful, the questionnaires were short and simple.

## **Pilot Testing**

Polit et al. (2001) defines a pilot test as a small scale version or trial run in preparations for a major study. In this study, a questionnaire pilot will be conducted to eliminate ambiguities which may have been captured unintentionally. This will result unto avoidance of misleading, inappropriate, and redundant question items. Mugenda and Mugenda (2003) provide a rule of thumb that 10% of the target population is sufficient for piloting. This meant that 6 participants out of 62 target population were selected randomly from the defined population. Participants in the pilot study were purposively excluded from the main study to avoid any possible respondent bias.

## **Data Processing and Analysis**

Collected data was edited, coded and checked to have the required quality, accuracy and completeness. The CAMELS model provided for the analysis of variables such as Capital Adequacy (CA), Asset Quality (AQ), Corporate Management Efficiency (CME), and Liquidity Management (LM). These variables were subjected to correlation analysis, including cross tabulation to establish the strength of their relationship. The regression model of the study was;  $Y_{fp} = b_{0} + b_{1} CA - b_{2} AQ - b_{3} LM$ 

Where;

b<sub>0</sub>. Constant term/Intercept
 Fp- Financial Performance
 CA – Capital Adequacy
 AQ – Asset Quality
 LM – Liquidity Management

Linear multiple regression analysis was used to determine how the predictor variables explains the dependent variable, while correlation analysis was used to analyze the qualitative variable that required ranking that is corporate management efficiency. Thereafter; analysis of these variables were done by the help of the computer software SPSS 20.0 which provided descriptive outputs. This is because there was more than one variable affecting the dependent variable. After processing and

analysis, the findings of the study were be presented in tabular and chart forms.

## **RESULTS AND DISCUSSION**

## Introduction

This chapter presents the study results, and discussions, data collected were both quantitative and qualitative, quantitative data were analyzed using descriptive statistics such as mean, and standard deviation and inferential statistics such as correlation analysis and regression while qualitative data was analyzed using content analysis. Data were presented using tables and charts.

#### Questionnaire return rate

A total of 53 questionnaires were given to 31 CEO's and 22 finance officers or accountants of SACCOs that had been in operation for more than 5 years in Kisumu County, out of which 33 were returned,23 CEO's and 10 finance officers or accountants giving a response rate of 62.26% which is a good response rate, this was mainly because a number of SACCOs have one officer doubling as CEO or accountant, though failure of 37.73% may be explained by inaccessible records of some of the dormant SACCOs, while some SACCOs did not maintain up to date records hence the difficulty in responding to the questionnaire. According to Mugenda and Mugenda (2003), 50% response rate is adequate, 60%good, above 70%is rated very good. Therefore in this study there was a good response on the return of the questionnaire.

## **Financial Performance measures of SACCOs**

The researcher sought to investigate the financial performance of SACCOs represented by Return on Asset (ROA), Return on Investment (ROI) and Return on Capital Employed (ROCE) so that the trend of the profitability based on the SACCOs earnings can be ascertained. The findings of this study are presented in Table 1 and frequency table Figure 2

## Return on Assets

Return on Asset was used in this study since firm's Assets contribute critically to the revenue generation and wealth creation, which spears growth in performance. In this research the study sought to establish the comparable performance of return on assets to other profitability indicators like return on investment and the return on capital employed for the period of 5 years of SACCOs in Kisumu County, measured by net income per total assets. Findings are presented in the Table 1.

Table 1. Summary of Data on Financial performance

Financial	YEAR				
Performance	2009	2010	2011	2012	2013
Indicator					
ROA	0.276478	0.228032	0.224243	0.158646	0.281598
ROI	0.536652	0.623795	0.594925	0.608924	0.703251
ROCE	0.519433	0.492242	0.450001	0.4865	0.494728

Source: Secondary Data

The mean Return on Asset (ROA) was ascertained on yearly basis for 5 year period as shown on the table 1 indicating a drop as the year progresses up to 2012, the drop in earning could be attributed to the fact that most SACCOs were not effectively converting the invested fund into net income.

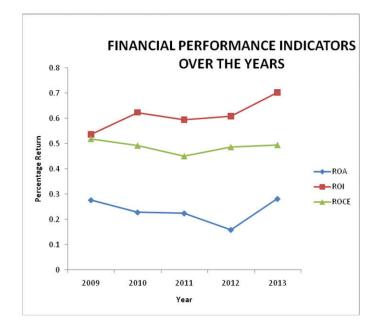


Figure 2. Financial Performance Indicators

Return on Investment (ROI) which is also a profitability ratio of SACCOs based on the fund invested is also on the down ward trend indicating not enough earning is realized from the SACCOs investment over the years, Return on Capital Employed (ROCE) increased in the first year then dropped steadily probably as a result of low income earnings as shown in the frequency Figure 2.

## **Return on Investment**

The researcher wanted to find out the trend in the performance of SACCOs based on the profitability ratio of return on investment so that it can be established if the SACCOs easily convert their earnings to investment for the growth of financial performance. All the respondents responded to the question 100%. Table 1 shows the percentage earnings based on the ratio of return on investment indicating a near stagnant performance though above 50% mark.

## Return on Capital Employed

The researcher also analyzed the Return on Capital Employed (ROCE), to ascertain how the SACCOS were efficiently utilizing their earnings, Figure 2 and Table 1 shows the yearly trend which is decreasing, implying that for a period of four years most SACCOs were not converting their assets into earnings indicating deficiencies in financial performances.

## **Capital Adequacy**

Capital is one of the factors that influence the level financial performance. The research sought to determine the extent of capital adequacy of the SACCOs in Kisumu County based on

the value of share capital, Debt level and profits earnings for the last 5 years. The findings are presented in Table 2 and the frequency table Figure 3. Out of the 33 SACCOs analyzed the share capital was increasing indicating effective cash mobilization strategy, but the debt level is very high while the profit remain low indicating a lower capital adequacy. The trend paints a gloomy picture on the prospects of investors who wants to see steady stream of sustainable development in profit from invested fund. The rise in debt could also be attributed to the fact that shareholders invest with sole purpose of borrowing rather than reinvesting.

## **Share capital Accumulation**

The researcher sought to establish if SACCOs were accumulating enough share capital to establish how this affects financial performance. The findings are presented in the Table 2 showing that there was an average annual increase in share capital buoyed by membership mobilization. There is a constant growth in share capital with maximum growth at 25.25% at year five (2013) and minimum at 11.95% at year one (2009).

#### Debt

The researcher wanted to find out if the SACCOs are growing their Debt Asset portfolio so that it can be established if SACCOs are benefitting members through provision of loans. The finding are in Table 2 showed that there was a decline of

#### **Profit**

The researcher wanted to establish the level of profits earned by SACCOs in the last five years, this was to ascertain if SACCOs are earning enough profit to support its growth, the findings are in Table 2 and Figure 3 which shows a decline in profit earnings of 23.45% in 2009 to 16.38% in 2011 which hampers the growth of SACCOs, though 2013 shows a marginal increase of 21.64%. This implies that majority of SACCOs in Kisumu County are performing poorly in terms of earnings. Figure 3. Frequency table showing Share Capital, Debt Accumulation and Profit.

## **Dividend Payout Ratio**

The researcher sought to find out the SACCOs latest dividend payout ratio so that it can be ascertained the number of SACCOs paying dividend so as to know the percentage of dividend declared relative to the amount of net income retained for operation. The findings of this study are presented in the table 3 and the pie chart Figure 2.4. Table 3 shows that out of 33 SACCOs respondents who participated in this study, 27(81.82%) fell in the bracket of Dividend payout ratio of 0-5%, 6(18.18%) fell in the bracket of Dividend payout ratio of 10-15%. This implies that majority of SACCOs pay a dividend of between 0% and 5% probably because they don't earn enough profit to declare dividend or the little earning is retained in the SACCO for operation and reinvestment.

Table 2. Data on Capital Adequacy

Conital Adaguage Variables	YEAR	YEAR					
Capital Adequacy Variables	2009	2010	2011	2012	2013		
Share Capital	1.180664	1.920424	2.084402	2.197576	2.495025		
Debt	14.83861	14.5676	12.68434	12.86081	13.64371		
Profit	1.72128	1.501909	1.202458	1.325624	1.588747		

Source: Secondary Data

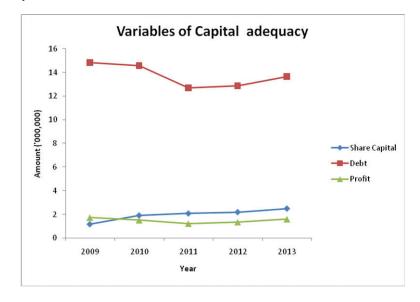


Figure 3. Share capital, Debt Accumulation and Profit trend

Table 3. Percentage distribution of Dividend by SACCOs

Dividend Payout Ratio	Frequency	Percentage (%)	Cumulative Percentage
0-5%	2781.82	81.82	
10-15%	6	18.18	18.18
Total	33	100	100

Source: Primary Data

The smallest percentage of respondents were in the proportion bracket of between 10% and 15% represented by 6 respondents these were the SACCOs with established offices and even operate the front office savings accounts, which could be giving them more earnings which enables them to declare higher dividend payout ratio.

## Techniques of attracting new members

The researcher sought to know the techniques adopted by the SACCOs in attracting new members and how this influence financial performance of SACCOs. Figure 4 which is a pie chart showing the percentage distribution of the various methods used by various SACCOs, majority of the respondents 14(41%) indicated that they use affordable loans, 12(35%) indicated they use sensitization method, 5(14%) indicated they membership flexibility, 2(7%) indicated they use institution based contact person, while only 1(3%) indicated that it was using industry orientation. This implies that since most investors join SACCOs with the aim of getting loan, that loan must be affordable for it to attract and retain members, though it was also noted that entirely all the 33(100%) use more than one strategy, this could be attributed to the competitiveness of the financial market, SACCOs have to contend with strong challenge from microfinance, shylocks and the mainstream financial institutions in attracting new members, personal selling recorded 0% indicating no SACCO was using this method of attracting new members probably because it was expensive method.

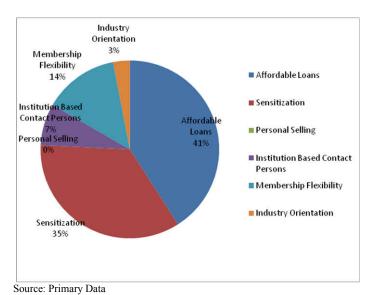


Figure 4. SACCOs methods of attracting new members

## **Asset Quality Ownership**

This was analyzed on the basis of the percentage of loan advanced to total assets of the SACCOs, as the percentage of total loans increased the total Assets either remain constant or decreased.

This has a negative implication on the quality of Assets which affects performance of SACCOs.

## Level of advances to total assets

The researcher sought to find out the SACCOs current level of advances in proportion to total assets, this was imperative to ascertain the amount of loan advanced to the members in proportion to the total assets owned by the SACCOs and to assess how it affects the financial performance of SACCOs in Kisumu County. The findings are as shown in Table 4.

Table 4. Proportion of Loan Advanced to Total Assets

Variables	Obs	mean	standard deviation	min
	max			
Proportion of advances to total	33	0.2163	0.25996	0.000163
assets			0.76	

Source: Secondary Data

From the table 4. the 33 respondents recorded a mean of 0.2163 and a standard deviation of 0.25996 with a minimum proportion of 0.000164 and a maximum of 0.76, this implies that the general mean is very low indicating that majority of SACCOs do not have enough assets to support the credit advanced to members, while on the analysis of the riskiness of the loan advanced 24 respondents were concentrated at between 25<sup>th</sup> percentile and 75<sup>th</sup> percentile with a skewness of -2.203048 at the 95<sup>th</sup> percentile indicating that majority of the SACCOs do not hold enough assets to support the loan advanced with a mean of 11.42152 and standard deviation of 3.763 implying that a large amount of loan has been advance to members in proportion to the assets of the SACCOs, this is probably because most members join SACCOs with aim of getting cheap credit which might affects the performance of the SACCOs.

## Loaning and repayment to Members and non members

The researcher sought to find out if SACCOs also advance loan to non members and what strategy they were using to ensure full recovery of the loans advanced to non members. The findings are presented in Table 5. Table 5 shows that 87.88% gave a negative response indicating they were not advancing loan to non members, while 12.12% gave a positive response indicating they were advancing loan to non members. This implies that majority of SACCOs only transact business with their members.

Table 5. Loan advances to non members

Response	Frequency	Percentage	Cumulative
No	29	87.88	87.88
Yes	4	12.12	12.12
Total	33	100	

Source: Primary Data

### Loan recovery strategies on non members

The researcher sought to establish the strategies SACCOs used to ensure they recover fully loan advanced to non members of the SACCOs, so as to establish the effectiveness of the methods used and their influence on the asset quality of the SACCOs that indicated advancing loan to non members. The

findings are as presented in the Table 6. The Table 6 shows that 2(50%) of the SACCOs used guaranteeing, 1(25%) used guaranteeing and collateral, another 1(25%) used guaranteeing and credit appraisal as the strategy of loan recovery, this implied that most of SACCOs giving loan to non members adopted guaranteeing as a better method of loan recovery.

Table 6. Strategies of loan recovery used by SACCOs on non members

Variables	Frequency	%	cumulative
Guaranteeing	2	50	50
Guaranteeing and Collateral	1	25	75
Guaranteeing and Credit App	raisal 1	25	
Others	0	<u>o</u>	
Total	4	100	100

Source: Primary Data

## Professional Information on Loaning

The researcher sought to find out if SACCOs are seeking information from contracted professionals prior to advancing loans so that it can be established the quality of loan advanced. The findings are presented in the Table 7. While 51.52 %( 17) responded positively that they seek information about the borrower's credit history and the advancement criteria before advancing the loan, 48.48 %(16) indicated negative response and only mentioned other reasons as the guiding factor while advancing the loan.

Table 7. Response on Professional Advice on loan advanced

Response	Frequency Cumulative	Percentage
No	16	48.48
	48.48	
Yes	17	51.52
	51.52	
Total	33	100

Source: Primary Data

## Institutions providing professional advice to SACCOs

The researcher also wanted to find out which professional contracted institutions are advising SACCOs prior to advancing the loan, the response was thus; Banking institution 29.41 % (5), Credit Bureau 35.29% (6), GOK 35.29 % (6). This indicates that probably some SACCOs are still not aware of the existence of professional institutions guiding financial institutions on how to manage the quality of their assets and mainly loan advanced to members. The Table 8 represents the findings.

#### **Bad Debt Accumulation**

The researcher wanted to find out the level of SACCOs bad debt accumulation over the years so that it can be established if this affects the quality of assets and performance. In the Figure 2.5 the trend of bad debt accumulation is on the upsurge indicating that majority of SACCOs are reeling on bad debt

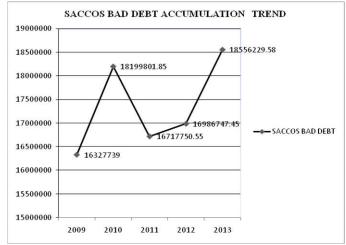
which definitely affects the financial flow in most SACCOs in Kisumu County.

Table 8. Institutions where SACCOs seek advice prior to Loan

Variables	Frequency	Percentage	Cumulative	
Banking Institution	5	29.41	29.41	
Credit Reference Bureau	6	35.29	64.71	
GoK	6	35.29		
Total	17	100		

Source: Primary Data

Between 2009 and 2010 the bad debt accumulation rose from 16.4 million to 18.4 million then dropped, this probably because of the enhance use of contracted professionals like the credit bureaus or some were written off and again between 2011 to 2013 the sharp increase is noted probably because most SACCOs have not enhanced the sharing of information on best practices.



Source: Secondary Data

Figure 5. Bad debt accumulation

**Table 9. Other investment options** 

Variables	Frequency	Percentage	Cumulative
Fixed Deposit	17	51.52	51.52
Security Exchange	10	30.30	
None	6	18.18	69.70
Total	33	100	

Source: Primary Data

## Other Sacco's investment

Investment provides more earning to financial institutions, apart from member loaning which are subject to repayments, other investments are useful for the growth of financial earnings. The researcher sought to find out if SACCOs in Kisumu County also have other areas of investment apart from loan advanced to members and non members. The findings are represented in the table 9. Out of the 33 respondent 51.52% (17) indicated that they also invested in fixed deposit apart from giving loan, 30.30% (10) indicated that they were investing in security exchange, 18.18% (6) indicated none.

Investment in fixed deposit of which majority of SACCOs exploit might not be ideal since banks offer lower interest rate on the invested fund, this probably could contribute to low earnings which affects financial performance in the end, 30.30% (10) of the respondent indicated they invested in security exchange, probably in the stock market shares which is highly volatile hence might negatively affect the financial performance, 18.18% (6) of the respondent don't have alternative investment apart from loaning this is dangerous especially when majority default, affecting the financial flow and the quality of the asset which as a negative impact on the financial performance of SACCOs.

## **Corporate Management Efficiency**

Management efficiency ensures sound functioning of firms by helping the organization maintain competitive edge over their competitors.

#### Composition of SACCOs Board Members

The researcher wanted to find out the establishment of the SACCOs Board currently. This was to enable the researcher to determine whether the SACCOs have the right capacity for management. The findings were presented as in the Table 10. Table 10 shows that 12.12% (4) SACCOs had 5 members as the directors, 42.42% (14) had 9 board members as the directors while 45.45% (15) had 12 board members as the Directors, the SACCOs with minority board were probably still in the process of bringing on board more directors so as to comply with the SASRA regulation. While larger percentage had complied with the regulation.

Table 10. Composition of Sacco Board members

No. of Board Members	Frequency	Percentage	Cumulative	_
SACCOs with 5 members	s 4	12.12	12.12	_
SACCOs with 9 members	14	42.42	54.55	
SACCOs with 12 member	rs 15	45.45	100	
Total	33	100		

Source: Primary Data

## **SACCOs Board Members Selection Method**

The researcher sought to establish the criteria used by members in constituting the board; this was to enable the researcher to establish the criteria that is most applicable to most SACCOs and if it affects performance. The findings are in the table 11. From the Table 11, majority of the respondents 30 (90.91%) indicated they use election by members as the best criteria of constituting the SACCO board, while 3(3.03%) use competence based selection, rotation and voluntary services as their methods.

Table 11. Criteria of selection of Boards of Management

Variables	Frequency	Percentage	Cumulative
Competence based selection	1	12.12	12.12
Election by Members	30	90.91	93.94
Rotation	1	3.03	96.97
Voluntary service	1	3.03	100
Total		33	100

Source: Primary data

This implies that majority of SACCOs board are constituted through voting by members. The 3 SACCOs are probably indicating other criteria because they are still in the process of constituting their board.

## The frequency of reconstituting the SACCOs Board

The researcher sought to establish the duration Board members take before they are either reappointed or replaced. This was to establish whether there is stability of tenure in the SACCOs. The findings are as in Table 12 below. Majority of the respondent 26(78.79%) reconstitute their SACCO board members after 3 years, 6(18.18%) reconstitute their SACCO board annually, while a paltry 1(3.03%) reconstitute their SACCO board bi-annually, this implies that majority of the SACCO are probably keen on the tenure to build stability and boost performance of SACCOs. Though the 21.21% (7) is still a critical mass that probably still has erratic operation.

Table 12. Period of Reconstitution of SACCO Board of Directors

Period of Reconstitution of SACCO Board	Frequency	Percent	Cumulative
Annually	6	18.18	18.18
Bi-Annually	1	3.03	21.21
After 3 years	26	78.79	100
Total	33	100	

Source: Primary Data

## CEO'S View on Sacco's employees

The researcher sought to find out the CEO's view on the SACCOs employees and if it has any influence on the corporate management of the SACCOs. The findings are as represented in the pie chart Figure 6. Most of the respondents, 38% indicated that their SACCOs had employed highly competent staff, 24% indicated that that SACCOs had defined capacity building for employees, 16% indicated that there was free flow of information among staff, 12% indicated that SACCOs employees labour turnover was controlled, while 10% indicated that SACCOs employees were competently compensated for their effort. This implies that as much as SACCOs employ highly competent staff as indicated, majority believed that they are not being compensated based on the level of competency, this probably might have a negative impact on the level of performance.

## CEO's view on the Board of Directors

The researcher sought to establish the SACCOs Chief Executive Officers view on the establishment of the SACCOs Board of Director's, this was to establish if the Board of Directors engagement has any influence on the SACCOs financial performance. The findings were tabulated in the correlation matrix Table 13. From the correlation matrix Table 13 the response on the variables were ranked as indicated. The variables analysis showed a weak positive correlation among

the variables. This implies that there is a relationship between the financial performance of the SACCOs and the management. As indicated by strong p-value most of the CEO's were in agreement on the link between the performance and the SACCO management. As management efficiency improves financial performance also improves.

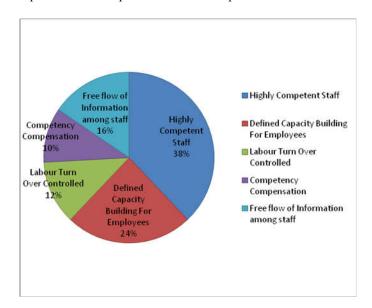


Figure 6. CEO's View on SACCO employees

## **Liquidity Management**

Liquidity refers to the ability of the firm to fulfill its financial obligations, mainly of depositors. Dang (2011) noted that adequate level of liquidity is positively related to the profitability.

indicating that majority of the SACCOs did not have short term or near cash asset investments. Probably the SACCOs had other policies of managing their short term financial obligations.

## Short term investment exploited by the SACCOs in Kisumu County

For the SACCOs that had a positive (yes) response the researcher wanted to find out which short term investment options are being exploited by them, this was to help the researcher analyze which of the investment options is exploited by most SACCOs. The findings are presented in the table 15. From the findings 7(50%) indicated that they were saving their cash probably with the commercial banks, while 7(50%) indicated that they were investing in shares, this probably indicate the reason why most SACCOs are not doing well since the strategies mostly adopted by them are not sustainable in terms of ensuring better returns, moreover shares are very erratic and might results into losses, while cash is prone to abuse in terms of embezzlement. 50% is a bigger margin which clearly manifest a lack of proper strategy of ensuring liquidity management.

## Insolvency status of SACCOs in Kisumu County

Insolvency is the inability of financial institution and or other institutions inability to honour creditors' claim. The researcher wanted to find out if SACCOs in Kisumu County have ever encountered a situation where they are unable to honour the creditors claim, this was to help analyze the SACCOs liquidity management ability. The findings were as shown in the Table 16.

**Table 13. Correlation Matrix of variables** 

	Variables	G	Н	I	J	K
G	Directors are highly qualified to lead SACCO to goals		P value= 0.267 Spearman's rho -	P value = 0.4925 Spearman's rho-	P value =0.8701 Spearman's	P value =0.9764 Spearman's rho
Н	The Board is transparently constituted	-	0.199	0.1238 P value = $0.8952$	rho0.0296 P value = 0.1279	0.0054 P value= 0.291
	as per the requirements	_	-	Spearman's rho 0.0238	Spearman's rho 0.2707	Spearman's rho 0.1868
I	Significant success has been realized by the input from the Directors				P value = 0.7984 Spearman's rho 0.0476	P value= 0.0338 Spearman's rho 0.3706
J	Board does not interfere with the management strategies	_	-	-		P value = 0.3076 Spearman's rho - 0.1832
K	There are fears of conflict of interest from the Directors	-	-	-	-	-

Source: Primary Data

## Investment in short term or near cash Assets

Here the researcher wanted to find out if SACCOs in Kisumu County invest in short term or near cash assets. The response was as indicated in the Table 14. This was to help in establishing if SACCOs have adequate liquidity to meet its short term financial obligation. Table 14 shows that 19(57.58%) respondent out of 33 responded negatively

Table 16 shows that 30(90.91%) indicated that they have never encountered a situation where they are unable to settle creditors claim, this is probably because they are managing their short term or near cash asset prudently or probably they might have shied to disclose their liquidity status for fear of victimization. The 3(9.09%) gave a positive response indicating that they had ones involve in a situation where they were unable to meet the creditors claim.

Table 14. Response on Investment in short term or near cash Assets

Variables	Frequency	Percentage	Cumulative	
Yes	14	42.42	42.42	
No 19		57.58	100.00	
Total	33	100.00		

Source: Primary Data

Table 15. Short term investment options exploited by SACCOs

Variables	Frequency	Percentage	Cumulative
Savings	7	50.00	50.00
Shares	7	50.00	100.00
Total	14	100.00	

Source: Primary Data

Table 16. Sacco's inability to honour creditor's claim

Response	Frequency	Percentage	cumulative
Yes	3	9.09	9.09
No	30	90.91	100.00
Total	33	100.00	

Source: Primary Data

## Methods of settling creditors claim in the case of SACCOs insolvency

The researcher wanted to establish which methods are being used by SACCOs in Kisumu County to settle claims in cases where they are unable to raise cash. The findings are as shown in the Table 17. Table 17 shows that 2(66.67%) indicated that they used renegotiation while only 1(33.33%) indicated using both renegotiation and members contribution. This simply implies that the two methods of settling creditors claim were both popular though renegotiation was the most applied method.

Table 17. Methods of settling claims

Settlement criteria	Frequency	Percentage	Cumulative
Renegotiation with	2	66.67	66.67
Creditors			
Renegotiation with Creditors	1	33.33	100.00
and members contribution			
<b>Total</b>	3	100.00	

Source: Primary Data

## Policy on Minimum Cash Retention

The researcher wanted to find out if SACCOs operating in Kisumu County have developed policies of managing their cash; this was to help in analysis if SACCOs have developed regulations that guide their liquidity management. The findings were as tabulated in Table 18. From the Table 18 the findings were, 96.97% indicated that they had the policy guiding minimum cash retention, while only 3.03% indicated that they did not have any policy in place and what guided them was customer demand. This implies that most SACCOs have developed policies that guide them in managing their liquidity, what might not be clear is whether SACCOs follow those set policy regulations.

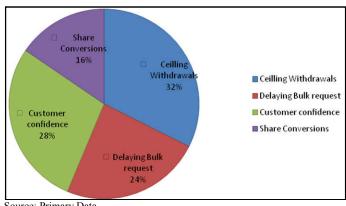
Table 18. Response on policy on cash retention

Response	Frequency	Percentage	Cumulative
No	1	3.03	3.03
Yes	32	96.97	100.00
Total	33	100.00	

Source: Primary Data

## Average cash held by SACCOs

The researcher wanted to find out the average minimum cash held by SACCOs in the last five years, from the 33 response analyzed it was found that the mean cash held by SACCOs in the last five years was Kshs.2.815million, with a minimum of zero and a maximum of Kshs.3million. This implies that as much SACCOs in Kisumu County have policies guiding their cash retention, the findings indicate that either the policy is not followed or most SACCOs have set very minimal value as their cash retention amount, as indicated from the questionnaire response some SACCOs do not have minimum cash though the policy is in place.



Source; Primary Data

Figure 7. Tools of controlling shock withdrawal

## Tool of Controlling Members Shock Withdrawal

Shock withdrawal is a situation where members of the SACCOs engage in a sudden and spontaneous bulk withdrawal of cash deposits from their SACCOs may be as a result of fear of collapse or instability. The researcher wanted to find out if SACCOs in Kisumu County have developed policies that guide in controlling shock withdrawal by members. The findings were as presented in the pie chart Figure 7 From Figure 7, 32% of the SACCOs indicated them using ceiling withdrawals, 28% indicated them using customer confidence, 24% indicated delaying bulk request while 16% indicated using share conversion. From the Figure 6 it can be noted that majority rely on ceiling withdrawal and customer confidence as the key method of controlling shock withdrawal, these strategies as much as they might be considered effective they still seem to be discouraging the growth of SACCOs in terms of fizzling flexibility.

## **Regression Model**

The model was developed to help in investigating the factors influencing financial performance of SACCOs in Kisumu County. The variables were derived from the CAMELS model which is a model that provides a rating of financial condition and performance of financial institutions. In this research the rating was done on the basis of Capital adequacy (CA), Asset Ouality (AO), Corporate Management (CM), and Liquidity Management (LM). The analysis of the data was done on cross-sectional basis thus not all the variables influencing financial performance were included in the model for analysis. Financial performance was measured by the Return on Asset (ROA) ratio, it is a profitability ratio that explains how efficient a management is using its assets to generate earnings, while the independent variable like Capital Adequacy was measured by the Debt level response since debt provide the measure of the availability of fund to supports members core business, Asset Quality was analyzed using Bad Debt accumulation since Bad debt consumes core capital that the company can use in its operation core business of lending and Liquidity was analyzed using the average minimum cash held by SACCOs in the last 5 years under study, save for management efficiency that was analyzed using correlation analysis.

From the regression model obtained keeping other factors constant, the financial performance indicated by Return on Asset (ROA), will be 0.08998. A unit change in the Capital Adequacy represented by (Debt level) holding other factors constant will change the Return on Asset by 0.0294788, a unit change in Asset Quality represented by (Bad Debt Accumulation) holding other factors constant will change the Return on Asset by -3.5<sup>-09</sup> while a unit change in Liquidity management represented by (Cash Retention) holding other factors constant will results in a change in Return on Asset (ROA) -7.10<sup>-08</sup>. This implies that Capital Adequacy (Debt level) had the highest influence on the financial performance represented by Return on Asset, followed by Asset Quality represented by Bad Debt Accumulation then Liquidity Management represented by Cash Retained. The obtained regression equation further implied that there was a direct relationship between Return on Asset and Capital Adequacy, while there was an inverse relationship between Return on Asset and Asset Quality and Return on Asset and Liquidity Management. The analysis was done at 95% confidence level or 5% significance level, the criteria for comparing whether the independent variable were significant in the model was through comparing the p-value obtained at  $\alpha = 0.05$ . If the pvalue was less than  $\alpha$ , then the independent variable was significant, if greater than α then it is not significant. Capital Adequacy represented by Debt level, Asset Quality represented Bad Debt and Liquidity Management represented by Cash Retention holding other factors constant, were significant in the model as their corresponding p-value were 0.01, 0.001 and 0.000 respectively.

## **Summary and Interpretation of findings**

The main objective of the study was to investigate factors influencing financial performance of Savings and Credit Cooperative Societies (SACCOs) in Kisumu County, the independent variables were obtained from the CAMELS model, which were then subjected to analysis using correlation analysis and regression model.

Table 19. Regression analysis

Source SS		degree of freedom	mean square
Model	8.58436348	3	2.86145449
Residual	9.47425542	29	0.326698463
Total	18.0586189	32	0.564331841

Number of observations = = 8.76

F (3, 29) = 0.0003

 $Prob \geq F$ 

R-squared = 0.4754Adj. R-squared = 0.4211

Root MSE = 0.57158

Source: Statistical package for social sciences(SPSS)

Table 20. Regression coefficient of the variables

Financial performance (ROA)	Coeff.	Std. Err.	T	P> t	[95% Conf.	Interval]
cash retention	-7.10e-08	1.86e-08	-3.81	0.001	-1.09e-07	-3.29e-08
bad debts	-3.50e-09	1.49e-09	-2.35	0.001	-6.56e-09	-4.50e-10
debts	.0294788	.0057927	5.09	0.000	.0176314	.0413262
constant	.0899833	.1130935	0.80	0.433	141319	.3212855

From the regression model analysis adjusted  $R^2$ =0.4211 shows a strong relationship between the independent variable (Return on Asset) and dependent variables Capital Adequacy( Debt level) holding other factors constant, while there was an inverse relationship between Asset Quality( Bad Debt) and Liquidity Management as they contributed 42.11% of the variation in the Return on Asset. The p- value of  $0.05^{\alpha}$  was obtained implying that the regression model was significant in predicting the relationship between financial performance (Return on Asset) and predictor variables as they were less than  $\alpha$ = 0.05. With regard to management efficiency the study found out that, there was a strong positive correlation with financial performance as the management becomes more efficient the financial performance also improved evidenced by strong p-value from the bi- variant analysis of the variables.

#### Summary, Conclusion, Limitations and Recommendations

#### Introduction

This chapter presents summary of findings, conclusions, limitations, recommendations and areas of further research. Then the policy recommendations and suggestions for further study are presented. The study is aimed at investigating factors influencing financial performance of SACCOs in Kisumu County. The variables are derived from the CAMELS model.

## **Summary**

Financial institutions play a vital role in economic resource allocation of countries. They channel funds from depositors to investors continuously, that is effectively realized when income are generated enough to cover operation cost. For sustainable mediation functions, financial institutions need to be profitable. Financial performance also has critical implication for economic growth of countries. Good financial performance rewards investment, while poor financial performance can lead to institutional failure and crisis which affects economic growth. Financial performance of a firm can be affected by internal and external factors, while internal factors are individual characteristics; external factors are macroeconomic to the institutions. Some scholars assert that financial performance is an essential measure to management. They help institutions achieve competitive advantage. Financial performance reflects management effectiveness and efficiency in making use of company resources expressed in terms of sales turn over, employment or stock prices. Financial performance is also important for organizational performance. Other scholars provide evidence of positive association of SACCOs with the Capacity to manage financial issues effectively. In countries where financial sector is dominated by SACCOs, any failure in the sub sector has an immense implication on the economic growth of the country. This is due to the contagion effect that can lead to crises and bring overall financial crisis and economic tribulation. In Kenya SACCOs comprises over 50% of all cooperatives, they play a critical role of financial intermediation in the financial landscape focusing mainly on the personal development. In 2012, SACCOs total assets stood at 216 billion representing a growth of 11% from 194 billion recorded in 2009. 80% of Kenyans derive their income through SACCO movement either directly

or indirectly. SACCOs are found in almost all sectors of the economy. SACCOs in Kenya face stiff competition from other players in the financial services like commercial banks, microfinance institutions, shylocks, and investment groups. In a population of 41 million only 24.6 million (63%) participate in SACCO directly or indirectly.3457 (51%) SACCOs are not operational; this has continued to frustrate the realization of millennium development goal (MDG) and vision 2030 of increasing financial inclusion. Various studies have been done using various variables namely; competition from commercial banks, members royalty and active participation, financial, organizational, educational factors, membership and legislative support among others. None of these studies adopted CAMELS model, this study was thus different from the previous ones as it adopted the CAMELS model in determining the factors that influence the financial performance of SACCOs in Kisumu County, Kenya. The variables were derived from the CAMELS model, which is a rating model first developed in USA, but have been used in comparing the performance of public and private banks in India. The specific objectives of the study were To determine the extent to which capital adequacy influences financial performance of SACCOs in Kisumu County; to evaluate the extent to which asset quality influences financial performance of SACCOs in Kisumu County; to determine how corporate management influences financial performance of SACCOs in Kisumu County; and to examine the influence of liquidity management on financial performance of SACCOs in Kisumu County.

The justification of the study is that 63% of Kenyan population benefits directly or indirectly from SACCOs implying the SACCOs entities plays a significant role. SACCOs stability ensure the country making economic milestone towards realization of Sustainable Development Goals and Vision 2030 objectives. The results of the study were to be used by SACCOs in positioning themselves and identify inherent challenges. The study results were also to benefit various stakeholders including government of Kenya, current and potential investors, members and management of SACCOs and scholars interested in similar or related areas of study. The study was packaged to analyse institutional factors that influence financial performance of SACCOs in Kisumu County, Kenya. The predictor variables were derived from the CAMELS model which included Capital Adequacy, Asset Quality, Corporate Management and Liquidity Management. Analysis of the study relationship was realized on both primary and secondary data from 33 active and registered SACCOs in Kisumu County represented by respective managing directors and finance managers due to their spatial knowledge on policy development and custody of SACCO records. Various literatures were reviewed analyzing theoretical view, internal factors affecting financial performance, empirical review, while also analysing the conceptual framework, critique and literature gap. Research methodology had the components of research design where in this study the researcher adopted survey design because most of the SACCOs had scatted offices making it difficult to use census. The study population constituted 31 SACCOs operating in Kisumu County, which have complied with SASRA regulation, a total of 62 participants were identified. The study sampled 53 study

participants using Yamane model. Secondary data were collected from the financial statements, management reports and media reports, while primary data was collected by use of questionnaire. Pilot testing was done to eliminate ambiguities, collected data was edited, coded and checked to have the required quality, accuracy and completeness. CAMELS model provided the variable for analysis, by subjecting them to cross tabulation, and correlation analysis this was to establish the strength of the relationships. Linear multiple regression analysis was used to determine how the predictor variables explains the dependent variables, while correlation analysis was used to analyze the qualitative variables. Analysis was done with the help of software SPSS 20.0 which provided descriptive output.

In this study profitability ratio of Return on Asset was analyzed from the secondary data for a period of 5 years, from 2009 to 2013 picking the mean performance per year 27.65%, 22.80%, 22.4243%, 15.8646% and 28.15% respectively, it showed a declining trend over the year save for 2013. Mean Return on Investment was also analyzed for the same period to help in establishing the trend as 53.66%, 62.37%, 59.49%, 60.89% and 70.32% this was increasing though the increase is negligible. Mean Return on Capital Employed was thus 51.94%, 49.22%, 45%, 48.65% and 49.41% respectively this also showed a decline in performance. Share Capital increased from 1.18 million, 1.92million, 2.08million, 2.197 million and 2.495 million respectively this shows a steady growth buoyed by increase in membership contribution. Debt also decreased from 14.838 million, 14.547 million, 12.684 million, 12.860 million and 13.64 million, less loans is being advance to members. Profit declined over the 5 year from 2009 to 2013 as indicated in the mean, 1.721 million, 1.501million, 1.202 million, 1.3256 million, and 1.5887 million respectively. Dividend payout ratio was very low 81.82% indicated to giving an average of 2.5% over 5 years. Only 18.18% response indicated to declaring an average of 12.5% over 5 years implying lower profit earnings. Majority use affordable loan as a strategy of attracting new members, a pointer to why debt level is rising steadily. The proportion of advances to Asset is negatively skewed at -2.20 at 95<sup>th</sup> percentile indicating poor performance of loan advanced, manifested by a mean of 11.42152 and standard deviation of 3.763. Majority of SACCOs that is 87.88% do not advance loan to non members, only 12.12% advance loan to non members as they use guarantee and collateral as the strategy of ensuring full repayment. Most of the SACCOs 48.48% indicated not seeking professional advice while advancing loan, this could probably be the reason why the bad debt is increasing steadily.35.29% use credit bureau, this a small proportion compared to 67.71% who seek advice from GOK and Banking institution which are competitor and might not give good advice while those seeking GOK are more or less small SACCOs which might not have adequate information on the loan behavior. Bad debt rose steadily from 2009 at 16.3 million, this indicates the reason why return on asset is declining in performance as it reduces the revenue earned. Most SACCOs 51.52% indicated to investing in fixed deposit while 30.30% indicated to investing in security, this investment options might not be as lucrative as other investment option not exploited. On members of the board,

45.45% indicated that they have 12 members in their Board while, 54.54% indicated to having Board members between 5 and 9. The SACCOs regulation requires SACCOs to have 12 members, so this imply that majority have not constituted the full Board, this affects decision making.

Also 90.91% of the respondent SACCOs indicated to conducting elections in constituting their Board of Directors. as 78.79% also indicated to reconstituting their Board of Directors after 3 years. This is necessary for stability in management. On the performance of staff the response was that 38% indicated that their staff was highly competent, 24% indicated that they have defined capacity building for employees, 16% indicated that there was free flow of information among staff,12% indicated controlling labour turnover, while 10% indicated that their staff are competently compensated. This implies that most of the SACCOs staff are not adequately compensated which might affect the performance. From the correlation matrix on the bi-variant analysis of the variables on the Board of Directors influence on the management efficiency, a strong positive p- value noted in the bi-variant analysis implies that management performance as a direct influence on the SACCOs financial performance. On liquidity management, 57.58% indicated that they did not have short term or near cash investment, while 42.42% indicated to having short term or near cash investment, this implies that most SACCOs might find it difficult to manage short term or cash obligation.50% of the SACCOs indicated to having savings and shares as their short term investment, these two products are prone to fluctuation. Majority of the SACCOs 90.91% indicated that they have never encountered a situation where they are unable to settle creditor's claims. Though there was skewed response, the 3 SACCOSs responded positively indicating that the situation was settled through renegotiation and using members contributions. Most of the SACCOs 96.97% indicated to having policy on minimum cash retention, a study of the financial statements pointed a different picture. In the last 5 years the average cash held by 33 SACCOs was 2.81 million with a minimum of zero (0) and a maximum of 3 million. This implies that most SACCOs do not have minimum cash held. On shock withdrawal, 32% of the respondent indicated that they were using Ceiling withdrawal, 28% indicated to use customer confidence, 24% use delaying bulk request, while 16% use share conversion. Ceiling withdrawal and customer confidence are the popular method used by SACCOs in Kisumu County, these method might be counterproductive for the growth of SACCOs incase other competitors introduce competitive strategies to counter them. The variable of the study were return on assets (dependent variable) and Capital adequacy(Debt level), Asset Quality(Bad debt), Corporate Management (analyzed using correlation analysis) and Liquidity Management(cash retention) were used as the predictor variables in this study as their performance is link to the overall financial performance. The study investigated the extent of influence of predictor variable on dependent variable using regression model, this was ascertained using significance level. SACCOs operating in Kisumu County were studied for the influence of these variables derived from the CAMELS model. The study findings established that data from the regression model analysis adjusted R2 =0.4211 shows that relationship exists

between the independent variable and dependent variables implying that the Capital Adequacy, Asset Quality and Liquidity Management contributed 42.11% of the variation in the Return on Asset. Descriptive research design was used in this study. Questionnaires, Secondary data were used as the tool of data collection.

#### Conclusion

The study concludes that financial performance of SACCOs in Kisumu County is influenced by capital adequacy, asset quality, management efficiency and liquidity management. Return on Asset are highly affected by capital adequacy but inversely related to Asset Quality and Liquidity management. Management efficiency also has a direct influence on the SACCOs financial performance, as the Capital Mobilization and Adequacy represented by the Debt level is increased, the Return on Asset also increases, this is attributed to the fact that the cash accumulated is what is lent to borrowers, the more the amount of cash accumulated the higher is the amount advanced as loan, it's from Debt that interest is generated to earn revenue for the SACCOs. Since Return on Asset was declining it meant that the Debt accumulation is not generating enough revenue inform of interest. The study also concluded that the lower dividend payout is attributed to the fact that most SACCOs do not earn enough revenue to distribute to members or may be using the earning in administration. The study further concluded that the rise in Bad Debt was impacting negatively on the financial performance as it was contributing to the decline in revenue earned. Finally the study concluded that as much as there was an increase in share capital over the period, this did not translate into earnings.

## **Study Limitations**

The participants were reluctant in giving sought information for fear that obtained data may be used to intimidate them or paint a negative image about them or their SACCOs. This was, however, mitigated by first seeking data collection approvals from relevant authorities prior to fieldwork. From each selected SACCO, management endorsement was sought through data-collection acceptance letter which was attached to each duplicated questionnaire. Moreover, the researcher also provided brief introduction of intent during which they were assured of their information confidentiality and researcher's strict compliance to obtained consent. Some SACCOs also had finance officers who were not well acquainted with the content of the information sought by the researcher; this forced the researcher to help in explaining some aspect of the information sought. Time constrain was also a limiting factor in this research since the researcher had to drop all the questionnaire to the respondent by himself and collect later, of which some respondent were still not ready with their filled questionnaires, but this was mitigated by the researcher working overtime to ensure adequate data is gathered for this research. Some SACCOs also did not have specific office of operation therefore the researcher had to get their contact through the parent Ministry of Industrialization and Enterprise Development from where they were reached through phone call.

#### Recommendations

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

## **Policy Recommendations**

The study established that financial performance is influenced by capital adequacy, asset quality, management efficiency and liquidity management. This is expressed in the value of adjusted  $R^2 = 0.4211$  which shows a positive relationship. The study recommended that management of SACCOs to take good care of Assets as they play a major role in generating finances for the SACCOs contributing good financial performance. The study also recommended that SACCOs board be properly put in place for all the SACCOs so as to boost efficiency and improve on revenue generation. Some SACCOs do not have oversight board. The study also realized that share capital accumulation is important for the growth of SACCOs wealth, it is imperative that all SACCOs engage in aggressive membership recruitment to boost their share capital. Loan constitute the highest percentage of SACCOs total Assets, it is the Asset that generate revenue. The study recommends that SACCOs improve their credit management practices so as to ensure that those being advance with loan repay them in time. This will protect the interest of the SACCOs and boost member's confidence. Finally the study recommended that SACCOs diversify their investment portfolios so as to improve on the SACCOs wealth and boost the financial performance.

## Suggestions for further studies

The study recommends that future studies be carried out on the impact of the best practices and bad practices sharing on the financial performance of SACCOs in Kisumu County. The government is in the process of coming up with the SACCOs policy of sharing best practices as well as bad practices for the growth of SACCOs financial performance. The study also recommends that future research be done on SACCOs with defined specific offices, the study also recommend the use of face to face interview to collect data so that the researcher can have a firsthand information rather than relying on the questionnaire which might have biases. The study further recommends that future research be narrowed to a case study one SACCO or two and comparing the relationship between Return on Asset and Return on Investment only as the dependent variable using PEARLS model. Finally the study recommends that analysis be done on the effects of microfinance banking practices on the growth of SACCOs financial performance in Kisumu C ounty.

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