

**THE EFFECT OF MOBILE SACCO SERVICE ON THE FINANCIAL
PERFORMANCE OF LICENSED DEPOSIT TAKING SACCOS IN NAIROBI COUNTY**

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DECLARATION

I hereby declare that this research project is my original work and has not presented in any other institution

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This research project has been submitted for presentation with my approval as the university supervisor.

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DEDICATION

This project is dedicated to my mother Mary Mwangi and my son Ayden Njoro. There are not enough words to describe how important my mother is to me and what a powerful influence she continues to be. Ayden, you are my pride, the twinkle in my eye and the reason I work this hard.

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LIST OF ABBREVIATIONS

ATM	Automated Teller Machine
DTS	Deposit Taking Saccos
DEA	Data Envelopment Analysis
FOSA	Front Office Service Activity
MMT	Mobile Money Transfer
M-SACCO	Mobile Sacco service
SACCOS	Savings and Credit Co-operatives Societies
SASRA	Sacco Societies Regulatory Authority

ABSTRACT

SACCOS have developed rapidly in terms of size, structure and variety of products and services by embracing technology to increase the speed of transactions, give clients more flexibility and reduce costs of doing business. With the introduction of M-Sacco, it is expected that the SACCOS' financial performance will improve as the SACCOS' avail their services to their members on the mobile platform thus increasing the volume of their transactions.

The study sought to establish the effect of Mobile Sacco service on the financial performance of licensed deposit taking SACCOS in Nairobi County with a focus on all 42 licensed deposit taking SACCOS in Nairobi County. The secondary data in this analysis covered a period of 4 years (2011 – 2014) and extracted from the audited financial statements which included comprehensive income statement and Statement of financial position. Data was analyzed using a linear regression equation model to establish the effect of Mobile Sacco service on financial performance of SACCOS in Nairobi County. From the regression model, the study found out that there were factors influencing the financial performance of licensed deposit taking SACCOS in Nairobi County, which are Number of M-SACCO transactions carried out, investment in M-SACCO service, size of SACCO, capital and management quality. They either influenced it positively or negatively. The five independent variables that were studied (Number of M-SACCO transactions carried out, investment in M-SACCO service, size of SACCO, capital and management quality) explain a substantial 65.8% of financial performance of licensed deposit taking SACCOS in Nairobi County as represented by the adjusted R^2 (0.658).

The study concludes that Number of M-SACCO transactions carried out, investment in M-SACCO service, size of SACCO, capital and management quality significantly influenced the financial performance of licensed deposit taking SACCOS in Nairobi County. The study therefore recommends that SASRA should enhance the authority's regulations such as ensuring safety and security of member's deposits through establishment and implementation of the Deposit Guarantee Fund (DGF), increased savings and credit due to stability in the Sacco sub-sector. The study also recommends that SACCO managers should have training programs on application of business process automation to promote growth and development of skills and technical capacities within the Sacco sub-sector since it is through the business process automation that has led to mobile banking being used in the delivery of services to members of SACCOS.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The Savings and Credit Co-operative Society (Sacco) sector has spurred Kenya's economic growth through the mobilization of domestic savings. The establishment of the Sacco Societies Regulatory Authority (SASRA), in 2009 has led to increased public confidence in the Sacco sector since its main objective is to protect the interests of Sacco members. SACCOS in Kenya face stiff competition from other players in financial services like commercial banks, micro-finance institutions, shylocks, pyramid schemes and investment groups. The introduction of Mobile Sacco, a mobile banking facility has enabled SACCOS to provide financial services to members via their mobile phones. This has led to the gradual transformation of SACCOS from a manual system of operations based on traditional savings and lending activities to a more open effective and competitive system which is able to offer an extensive range of products and services. The increased growth in Sacco Membership, products and services has led to many SACCOS adapting the M-Sacco technology and therefore improved productivity and service delivery.

SACCOS in Kenya have developed rapidly in terms of size, structure and variety of products and services. Oyugi (2014) found that majority of the financial institutions had introduced internet banking services, mobile banking and ATM services. This research took into consideration five factors, that is, expenditure in internet banking, automation of banking systems, mobile banking, the number of ATM cards issued with-in the institutions and size of the SACCO. It was also noted, that there was a positive effect on financial performance of SACCOS licensed by SASRA.

It is arguable that, Sacco financial growth in Kenya is mainly driven by, prudent loan management, institutional strengths and innovativeness of Sacco products as propagated by Olando, Jagongo and Mbewa (2013) in their investigation of the contribution of Sacco financial stewardship to growth of SACCOS in Kenya. This calls for a need to address the effect of new technology on financial performance of SACCOS in Kenya.

1.1.1 MobileSacco Service

Mobile Sacco is a mobile banking facility that provides financial services to Sacco members. Members must have a Front Office Service Activity (FOSA) account to be activated to transact. The M-Sacco technology rides on the MPESA platform. It is important to note that there are other MMT technologies deployed in the Sacco sector. However M-Sacco is the most successful technology that has been widely embraced by most SACCOS. In the comfort of any location, a member can be able to check mini statements of their FOSA accounts, query loan balances, pay or reduce loan obligations, apply for salary advances, amongst many other available applications and services in a paperless technological environment, through their phone service. Automation developments and financial liberalisation (deregulation) are viewed as the main forces influencing the financial sector's development (Edey & Gray 1996).

However, Okiro and Ndung'u (2013) found that mobile banking faced various challenges, for example, system delays by the mobile money transfer service providers, slow processing of transactions especially on weekends, high transaction costs, limits pertaining to the amount of money that can be withdrawn in a day and fraud. They advised that these challenges can be resolved through the regular maintenance of mobile money transfer systems which would help in managing the systems' capacity, thereby addressing the problem of transaction delays and

improving customer service through speedy support and lower user charges. Okiro and Ndung'u (2013) noted that due to the tremendous growth of the mobile phone industry, most financial institutions have ventured into the untapped opportunity and have partnered with mobile phone network providers to offer banking services to their clients.

1.1.2 Financial Performance of SACCOS

Financial performance is a process of measuring the results of a firm's policies and operations in monetary terms. It is also a measure of a firm's overall financial health over a given period of time and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Metcalf & Titard, 1976). Financial performance also measures how well a firm is generating value for its owners. The more efficient the financial system is, the better the economy (Schumpeter, 1969) and therefore the objective of wealth maximization of shareholders of firms is achieved.

Financial performance can be evaluated through various financial measures such as Profit after Tax, Return on Assets, Return on Equity, Earnings per Share and any other ratio that is accepted. To ascertain the financial performance of a firm, a thorough analysis of the financial statements is done in such a way that it undertakes full diagnosis of the profitability and financial soundness of the business. The analysis of financial statements is a process of evaluating the relationship between component parts of financial statements to obtain a better understanding of the firm's position and performance. SACCOS are required to file audited financial statements every fiscal year and although SACCOS comply with this requirement, there has been a shortcomings including non-availability of financial statements on regular basis. To promote financial transparency, SACCOS should provide timely financial updates.

The Sacco Societies Act (2012) states that every Sacco society should keep proper books of accounts and the accounts and records should show a true and fair state of affairs, explain all transactions and financial position which should comply with the international financial reporting standards. According to SASRA Sacco Report 2013, the authority requires SACCOS to adhere to a minimum capital requirement of Ksh 10million which should be maintained at all times while the ratio of core capital to total assets should stand at 10%.The authority requirement provides that SACCOS comply with core capital to total deposits ratio of 8%.SACCOS are required to observe the regulations on classifications of risk assets and provisioning thereof, that is, credit facilities to members to be classified based on performance vis a vis loan terms as per loan contract. SACCOS are also required to match the level of liquid resources to the short term Front Office Service Activity (FOSA) deposits and other liabilities in order to remain liquid and the minimum regulatory requirement ratio is 15%.Further to enhance sound liquidity management, deposit-taking SACCOS can only acquire external borrowings to the extent of 25% relative to total assets.

This study will use technical efficiency as a measure of financial performance over a period of four years. Data Envelopment Analysis (DEA) will be used to measure technical financial performance of licensed deposit taking SACCOS in Nairobi County. Mwangi(2013) in his investigation of determinants of efficiency of Savings and Credit co-operative Societies in Nairobi County found that the key pillar of a successful economy is financial efficiency and that an efficient business will show increased profitability with less input of resources. Efficiency indicates how well an organization uses its resources to produce goods and services. According to Berger et al.(1993), efficiency implies improved profitability, greater amount of funds

channeled in, better prices and services quality for consumers as well as greater safety in terms of improved capital buffer in absorbing risks.

1.1.3 Effects of M-Sacco service on financial performance of SACCOS

SACCOS are embracing technology to increase the speed of transactions, give clients more flexibility and reduce costs of doing business. The benefit of M-Sacco to the SACCOS which have already adopted this technology is that transactions can be done outside the normal banking hours and it has also enabled Members carryout high value transactions in a secure way round the clock, enabling a 24 hour transactional environment. The technology has led to transactions being easily auditable thus minimizing cases of frauds. Automation improves work progress as it reduces on paper work and internal procedures can be tracked through the system, increases on transparency and thereby improves on efficiency. This means that customer queries are addressed expediently saving both time and money. Sacco management challenges include a demand for increasing returns by shareholders and such come at a cost of increased investment and operational risks. Insolvency is an ever present reality in the Sacco sector.

The performance of SACCOs in Kenya depends on how efficient they are so that they can be able to cover all expenses as well as give something back to its shareholders. The major concern by the various stakeholders who have an interest in these Co-operative Societies is whether they are operating efficiently. Most SACCOS were formed a long time ago but their performance is not at par with commercial banks and other financial institutions because of poor performance attributed to poor utilization of surplus and reserves, mis-management of funds and poor dividend and investment decisions. Also the increased competition from other financial service

providers and other factors such as retrenchment, poor management and loan defaulting have all influenced SACCOS performance in Kenya.

Okiro and Ndung'u (2013) noted that financial institutions in Kenya cannot afford to ignore information systems since they play an important role in their operations because consumers are conscious of technological advancements and demand higher quality services. SASRA has identified seven thematic areas which are of great interest to the way SACCOS should conduct their business and are seen to be co-operative principles which are; board practices, senior management, risk management and internal controls, compensation, disclosure and transparency and the role of supervisors as a measure of securing Sacco funds. With the introduction of M-Sacco, it is expected that the SACCOS' financial performance will improve as the SACCOS' avail their services to their members on the mobile platform thus increasing the volume of their transactions. Therefore, the mobile Sacco service is expected to be positively related to financial performance of SACCOS.

1.1.4 Licensed deposit taking SACCOS in Nairobi County

The Sacco Societies Act defines a Sacco as a savings and credit co-operative society registered under the Co-operative Societies Act, 1997 and holds a valid license issued under this Act. A co-operative society is an autonomous association of persons united voluntarily to meet their common economic, cultural need(s) and aspirations through a jointly owned and a democratically controlled enterprise. In Kenya there are two types of SACCOS namely Deposit Taking SACCOS (DTS) and non-DepositTakingSACCOS (NDTS). SACCOS are seen to be

good vehicles for assisting people improve their socio-economic situation through the financial facilities they afford their members.

According to the 2006 USAID Working Paper -Sustainable Sacco Development, the two fundamental functions of a Sacco Society are financial intermediation and investment, that is, bringing savers and borrowers together in a system that enables them to pool their money as savings and shares, and after capturing funds, the SACCOS transform these funds into loans by factoring in all of the costs of doing business, as well as creating business and lending models that enable them create profits for the Sacco and its members.SACCOS have been recognized worldwide as important avenues for economic growth. SACCOSplay a significant role in the provision of financial services to the poor (target groups).They provide savings and investment opportunities to individuals, institutions and group members. SACCOS perform an active financial intermediation function particularly mediating from urban to semi-urban to rural areas and between net savers and borrowers while ensuring that loan resources remain in communities from which the savings were mobilized.

According to Kenya Gazette No.447, there are 42 SACCOS in Nairobi licensed to undertake deposit taking Sacco business for the financial year ending December 2014.SACCOS purely deal with mobilizing money from members as savings, shares and providing easy accessible loans to members on time therefore to be successful and sustainable SACCOS should function similar to banks as a money market in a group sharing a common bond. According to the World Council of Credit Unions (WOCCU) 2014 Annual Report, the credit unions development programs impacted 4.8 million members in 8 countries which included Kenya. The programs focused on

expanding financial inclusion in rural and urban areas, extending agricultural finance and training, developing mobile money and payment systems and improving regulatory systems and training. WOCCU aims to work with credit unions to expand remote access to services via technology and linking payment networks to financial services. The adoption of M-Sacco service by most SACCOS located in Nairobi is an indication that the SACCOS aim to achieve the Vision 2020 global membership growth campaign initiated in 2014 by WOCCU to extend credit union services to at least 50 million new people by the year 2020. The study will focus on licensed deposit taking SACCOS in Nairobi which have adopted the Mobile Sacco product in service delivery to their members.

1.2 Research Problem

The establishment of SASRA in 2009 has seen the SACCOS enhance the authority's regulations such as ensuring safety and security of members deposits through establishment and implementation of the Deposit Guarantee Fund (DGF), increased savings and credit due to stability in the Sacco sub-sector, application of business process automation and training programs to promote growth and development of skills and technical capacities within the Sacco sub-sector. It is through the business process automation that has led to mobile banking being used in the delivery of services to members of SACCOS. Oyugi (2014) noted that SACCOS have increased the service quality outreach to many remote parts in order to keep pace with the demands of the world, to counter competition and to improve financial performance. Many SACCOS in Kenya have adopted the use of M-Sacco service to deliver services, for example, Ukulima Sacco, Mwalimu Sacco and Stima Sacco are the few SACCOS that have membership spread nationwide with members accessing services from anywhere, and they can access money through their mobile phones and also accessing statements online.

However, the SACCOS face the challenge of connecting their branches given the capacity of the available infrastructure and fraud resulting from unregistered mobile numbers. Thus, there is need to manage risks and costs associated with mobile Sacco service product.

Several studies have been done on the financial performance of SACCOS in Kenya, for example, Wanyoike (2013) found that corporate governance was identified as the most significant effect of the SASRA regulations on the SACCOS financial performance. Kiaritha et al (2014) found that SACCOS have effective policies to managing their operating costs in their study of effect of operating costs on the financial performance of SACCOS in the banking sector in Kenya. Okiro and Ndung'u (2013) investigated the impact of mobile and internet banking on the financial institutions in Kenya. Oyugi (2014) investigated the effect of automated service on financial performance of SACCOS licensed by SASRA in Kenya. However, little has been researched on the effect of mobile Sacco service (M-Sacco) on financial performance of the SACCOS. This study therefore seeks to address the research question: What is the effect of the M-Sacco service on the financial performance of SACCOS located in Nairobi County?

1.3 Research Objective

The objective was to establish the effect of Mobile Sacco service on the financial performance of licensed deposit taking SACCOS in Nairobi County.

1.4 Value of the Study

The findings of this study aim to establish the effect of the M-Sacco service on the financial performance of SACCOS located in Nairobi County. The study will help in educating other SACCOS that are yet to adapt the Mobile Sacco service about the benefit of adapting M-Sacco service in their operations for effective service delivery to their members. Sacco Members will also appreciate developments in the Sacco sector financial evaluations.

The findings of this study would enhance the efforts of government regulators in encouraging adoption of financial innovations.

Finally, the study will be important for scholars and academicians. It will contribute to the pool of knowledge base in mobile money transaction services and financial performance therefore forms an important addition to reference materials. Further, this study will stimulate further interest to both researchers and students interested in this field to carry further studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focuses on previous studies done by various authors in relation to financial performance of licensed deposit taking SACCOS in Nairobi County. The chapter is divided into four sections. The first section discusses theories relating to mobile Sacco service (M-Sacco). The second section discusses determinants of financial performance. The third section will cover the empirical review. This section also gives a brief description of the research methodologies used by previous studies in attaining their objectives. The fourth section will cover the summary of literature review.

2.2 Theoretical Review

This section presents the theoretical foundation of the study. Therefore, this study is based on the following theories.

2.2.1 Diffusion of Innovations Theory

Diffusion of Innovations (DOI) theory was developed by E. M. Rogers in 1962. Denning (2004) defined an innovation as a transformation of practice in a community. Mahajan and Peterson (1985) defined an innovation as an idea, practice or object that is perceived to be new by members of the social system, and defined the diffusion of innovation as the process by which innovation is communicated through certain channels over time among members of the social system. Diffusion of innovation theory attempts to explain and describe the mechanisms of how new inventions in this case internet and mobile banking is adopted and becomes successful,

Clarke (1995). Sevcik (2004) stated that not all innovations are adopted even if they are good as it may take a long time for an innovation to be adopted. He further stated that resistance to change may be a hindrance to diffusion of innovation although it might not stop the innovation but slow it down. Rogers diffusion of innovation theory postulate that diffusion of innovation occurs as potential users become aware of the innovation, judge its relative value and make a decision based on their judgment, implement or reject the innovation and seek confirmation of the adoption or rejection decision.

The theory consists of three components: innovation decision process, characteristics of an innovation and the adopter's characteristics. Rogers (1995) identified five critical attributes that greatly influence the rate of adoption, which include relative advantage, compatibility, complexity, trialability and observability. Rogers also observed that the rate of adoption of new innovations depends on how an organization perceives its five critical attributes, that is, if an organization in Kenya observes the benefits of mobile and internet banking, they will adopt these innovations given other factors such as the availability of the required tools. Adoption of such innovations will be faster in organizations that have internet access and information technology departments, than in organizations without. This theory is important to the study as it can be linked to the mobile Sacco service as SACCOS need to adapt to new technology contrary to the traditional way of operations they had long adopted.

2.2.2 Technology Acceptance Model

The model was developed by Davis (1986).The theory places more emphasis on psychological predispositions and social influences such as beliefs, attitudes and intentions. The theory deals

specifically with the prediction of the acceptability of an information system. The purpose of the Technology Acceptance Model (TAM) was to predict the acceptability of a tool and to identify the modifications which must be brought to the system in order to make it acceptable to users. The theory suggested that acceptability of an information system is determined by two factors namely perceived usefulness and perceived ease of use. Davis further noted that an individual's attitude was not the only factor that determined his use of a system but also the impact it may have on the individual's performance. The theory is important to this study because it cautions SACCOS to sensitize employees about impending technology that they wish to adapt so that the employees can readily accept when the new technology is implemented.

2.3 Determinants of Financial Performance of SACCOS

According to Sinani et al. (2007), the growing body of theoretical and empirical literature on firm performance has identified variables such as firm trade orientation, investment in fixed capital, soft budget constraints, quality of labor, competition, among others as determinants of firm performance and consequently firm efficiency. Dang(2011) in his study explains the CAMEL model is a ratio based model that is often used for evaluating the performance of financial institutions. CAMEL is an acronym that stands for Capital adequacy, Asset quality, Management efficiency, Earnings ability and Liquidity.

This study will be using the following financial institution variables which Mwangi (2013) used in his study on determinants of efficiency of Savings and Credit Cooperative Societies which were capital, size, credit risk, and management quality. Capital will be measured as the ratio of equity to total assets; credit risk will be measured as the ratio of loans issued to members over

total assets while the management quality was measured as the ratio of non-interest expenses over total assets. Size refers to the total assets of the SACCO and since other dependent variables under consideration are standardized by using total assets, then size was measured as logarithm of total assets.

2.4 Empirical Review

Tiwari, Buse and Herstatt (2006) studied mobile banking as business strategy, impact of mobile technologies on customer behavior and its implications for banks. The study sought to examine the opportunities for banks to generate revenues by offering value added; innovative mobile financial services while retaining and even extending their base of technology to understanding customers.

Ssebaale (2011) investigated financial strategies, financial sustainability and outreach of SACCOS in Uganda. The objective of the study was to examine the relationship between financing strategies, financial sustainability and the outreach of SACCOS in Uganda. The study adopted a cross sectional research design. The study revealed that a significant positive relationship existed between financing strategies and financial sustainability and also between financing strategies and outreach of SACCOS. Also a significant positive relationship was found between financial sustainability and outreach of SACCOS. The study concluded that for SACCOS to achieve a desired level of outreach in terms of depth and breadth, they should be in a position to cover loan write-offs, have their retained earnings rising every year and reduce the default rate. Also the SACCOS should adopt the right financing strategies if they are to achieve the desired levels of financial sustainability.

Tchouassi (2012) sought to find out whether mobile phones really work to extend banking services to the unbanked using empirical Lessons from Selected Sub-Saharan Africa Countries. This study sought to discuss how mobile phones could be used to extend banking services to the unbanked, poor and vulnerable population. The study noted that poor, vulnerable and low-income households in Sub-Saharan Africa (SSA) countries often lacked access to bank accounts and faced high costs of conducting basic financial transactions. The mobile phone presented a great opportunity for the provision of financial services to the unbanked. In addition to technological and economic innovation, policy and regulatory innovation was needed to make these services a reality.

Singh et al. (2013) carried out a study on technical efficiency and its determinants in micro finance institutions in India on a firm level analysis. They obtained data from Mix Market Network and a total of 41 micro finance institutions were sampled depending on the availability of data for five consecutive years 2005 – 2009. The study employed DEA model since it integrates multiple inputs and outputs, and it does not require any price information for dual cost function as is required for parametric approaches. The results showed that correlation coefficient of value of total assets is positive with all the efficiency measures and that of age is positive with pure technical efficiency and scale efficiency. The location variable exhibits positive 15 correlation with efficiency measures and it indicates that micro finance institutions from southern India have positive correlation with all the three measures of efficiency. However, debt equity ratio was found to be negatively related to pure technical efficiency and scale efficiency measures. Return on assets and operational self-sufficiency which represents the financial ability of micro finance institutions had positive correlation with all the measures of efficiency.

Ndiege and Qin (2013) investigated the role of financial development in economic growth through evidence of savings and credit co-operatives societies in Tanzania. The objective of the study was to examine whether financial development in co-operative-based microfinance had a role to play in Tanzanian economic growth. They analyzed the objective by finding out whether financial services in SACCOS were significant factors for economic growth and also whether financial services in SACCOS Granger caused economic growth. This allowed them to test for causal effects between financial development and economic growth using Granger causality tests. The study used time series data that covered the period 1990-2012 as the period was within the time of the financial liberalization and development in Tanzania. The study also found that financial development in Granger caused economic growth, that is, SACCOS were much useful in economic development in Tanzania because their foremost objective was to mobilize savings. The study concluded that there was a strong relationship between financial development and economic growth in that savings were much more important in fostering economic development as compared to credits. The study recommended that SACCOS should be promoted by emphasizing on the savings objectives.

Tumwine, Mbabazize and Shukla(2015) investigated SACCOS' services' terms and members economic development in Rwanda; a case study of Zigama Sacco Ltd. The objective of the study was to find out the contribution of SACCOS' services' terms to members' economic development in Rwanda using Zigama Sacco as a case study. The study covered a period of 15 years that is between 2000 and 2015. The study found that there was a strong positive and significant relationship between savings services' terms and members' economic development and also a significant influence on savings services' terms on members' economic development.

The study also revealed a strong positive and significant relationship between credit service terms and members' economic development and also a significant influence of credit service terms on members' economic development. The study concluded that savings and credit terms at Zigamahad a significant effect on members' economic development and that both savings and credit terms were significantly correlated with members' economic development and significantly predicted members' economic development.

Wambari(2009) studied mobile banking in developing countries using a case of Kenya. This study sought to establish the importance of mobile banking in the day to-day running of small businesses in Kenya and to understand the challenges involved in using m-banking as a business tool and appreciate the advantages and disadvantages there in. The study elaborated that the adoption and use of mobile phones is a product of a social process, embedded insocial practices such as SMEs practices which leads to some economic benefits.

Mwangi (2013) in his study investigated the determinants of efficiency of savings and credit co-operative (SACCO) societies in Nairobi County. The study found out that there were factors influencing the financial performance of licensed deposit taking SACCOS in Nairobi County, which are size, capital, credit risk and management quality. They either influenced it positively or negatively. The four independent variables that were studied (size, capital, credit risk and management quality) explained a substantial 69.9% of the financial performance of licensed deposit taking SACCOS in Nairobi County as represented by the average R2 (0.699). The study concluded that size, capitalization and management quality positively and significantly influenced financial performance of licensed deposit taking SACCOS in Nairobi County while

credit risk inversely affected financial performance of licensed deposit taking SACCOS in Nairobi County. The study recommended that there was need to understand the changes that technology was causing on the financial sector in order to examine in detail how the recent and foreseeable advances in technology can affect its future evolution. The study also recommended that all the SACCOs should embrace the concept of credit risk management practices. There was also need to address the managerial gaps in SACCOs in the areas of training, organization capability, reliability, risk taking propensity and customer relationship management.

Okiro and Ndungu (2013) investigated the impact of mobile and internet banking on performance of financial institutions in Kenya. The study objectives were to establish the impact of mobile and internet banking on performance of financial institutions in Kenya and the extent of use of mobile and internet banking in financial institutions in Kenya. The study found that commercial banks had the highest rate of usage of mobile banking, seconded by SACCOs and that the usage of mobile banking among financial institutions was moderate among the microfinance institutions. The study also found that 67.6% of the respondents used internet banking services. The study concluded that the adoption of internet banking had enhanced performance of the banking industry due to increased efficiency, effectiveness and productivity. However, the mobile banking faced various challenges which could be solved through regular maintenance of mobile money transfer systems which may help in managing the system's capacity thereby solving the problem of transaction delays and improve customer service through speedy support and lower user charges.

Karagu and Okibo (2014) investigated financial factors influencing performance of savings and credit co-operative organization in Kenya. The objective of the study was to find out the financial factors that influence Sacco performance in Kenya using a case study of deposit taking SACCOS licensed by SASRA in Nairobi County. The study found that fund misappropriations, investment decisions, loan defaulting and member withdrawal influenced SACCOS' performance. The study concluded that SACCOS needed to improve on their internal audit department and other internal control measures, invest in prudent projects in order to achieve better returns, put in place loan recovery strategies and finally introduction of more products so that the SACCOS could compete with other financial institutions.

Kiaritha, Mouni and Mung'atu (2014) investigated the effect of operating costs on the financial performance of SACCOS in the banking sector in Kenya. The objective was to find out whether operating costs influenced the financial performance of SACCOS in the banking sector in Kenya. The study adopted a descriptive survey design. The target population was employees and members of SACCOS in the banking sector in Kenya and due to constraints the accessible population was SACCOS in the banking sector located within Nairobi. The study found that that financial performance was positively correlated with operating costs. The regression results further revealed that operating cost was statistically significant in explaining financial performance of SACCOS in banking sector in Kenya. The study concluded that there were effective policies at the SACCOS to govern the operating cost and running of the Sacco. This is because employees agreed that salaries, rent, council rates and interest on member deposits were a major cost to their Sacco. The study also showed that managing operating costs was statistically significant in explaining financial performance of SACCOS.

Oyugi (2014) investigated the effect of automated service on financial performance of SACCOS licensed by SASRA in Kenya. The objective of the study was to determine the effect of automated service on financial performance of SACCOS licensed by SASRA in Kenya. The study found that majority of the SACCOS had introduced internet banking services and mobile banking in the year 2011-2012. The study concluded that automated services did have a positive influence on the financial performance of SACCOS licensed by SASRA in Kenya.

2.5 Summary of Literature Review

Ssebaale (2011) noted that for SACCOS to achieve a desired level of outreach, they should be able to cover the loan write-offs, have their retained earnings rising every year and reduce the default rate and also should be able to operate without donor dependence. Kiaritha et al. (2014) found that the relationship between operating costs of SACCOS and financial management was positive, in that, if SACCOS have effective strategic plans and policies and governing the running of SACCOS, this would help in reduction of operating costs. Karagu and Okibo (2014) noted that for SACCOS to remain relevant in today's competitive business environment they should come up with member retention policies and new competitive strategies.

Oyugi(2014) found that automated services did have a positive influence on the financial performance of SACCOS in Kenya. Okiro and Ndung'u(2013) found that commercial banks were leading in the use of mobile banking, followed closely by SACCOS and lastly by microfinance institutions. Kivuvo and Olweny(2014) noted that liquidity, profitability, operating efficiency and total assets turnover were crucial in the determination of the strength of a Sacco.

This shows that despite the empirical studies reviewed above, there still remains a research gap as to the effect of mobile Sacco service on the financial performance of SACCOS.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter focused on the research methodology used in carrying out the study. It provided the; research design, population of the study, sample design, data collection methods, data analysis which included: data validity and reliability and finally the analytical model.

3.2 Research Design

Kombo and Tromp (2006) define research design as the scheme outline or plan that is used to generate answers to research problems. This study employed descriptive survey design to determine the effect of M-sacco service on financial performance of licensed deposit taking SACCOS in Nairobi County.

3.3 Population and Sample

Nachmias and Nachmias (1996) defined a population as the entire set of relevant units of analysis. This study focused on all 42 licensed deposit taking SACCOS in Nairobi County. A census was conducted. The number was obtained from the list of licensed Saccos provided by SASRA for the period ending December 2015(see attached Appendix I).Nairobi County was chosen because of its cosmopolitan nature and there would be minimal costs associated with the County. Since a census survey was done, there was no sample in this study.

3.4 Data Collection

Secondary data was used in the study. According to Cooper and Schindler (2003), secondary data involves collection and analysis of published material and information from other sources such as annual reports, published data. The secondary data obtained from audited financial statements of the SACCOS under review covered four years from the year 2011 up to the year 2014.

3.5 Data Analysis

Financial Performance, the dependent variable, was represented in terms of technical efficiency. Data Envelopment Analysis (DEA) was used to measure technical financial performance of licensed deposit taking SACCOS in Nairobi County. DEA is a flexible performance measurement that is based on plotting inputs and outputs in multidimensional space. It is typically used to measure technical efficiency, i.e. the ability to produce maximum output from a given set of inputs. Efficiency for a firm or decision making unit is measured by output/ input where savings and total expenses are identified as inputs while loans and total income are identified as outputs (Paxton, 2003). The data collected was then analyzed in order to determine the relationship between M-sacco and Financial Performance (measured through technical efficiency). Further analysis was done through regression analysis due to its ability to test the nature of influence of independent variables on a dependent variable.

3.5.1 Analytical Model

The analytical model was based on a multiple regression model to establish the effect of Mobile Sacco service on financial performance of SACCOS in Nairobi County. Regression is able to

estimate the coefficients of the linear equation, involving one or more independent variables, which best predicted the value of the dependent variable (Cooper and Schindler (2003). Data analysis will be done using SSPS software (Statistical Package for Social Sciences).

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Where

Y = Financial Performance – measured by Efficiency

α = constant term / y intercept

β = regression co-efficient (all the beta coefficients were hypothesized to have positive values indicating a positive relationship between the independent variables and the dependent variable)

X_1 = Number of M-Sacco transactions carried out

X_2 = Investment in M-Sacco service

X_3 = Size of Sacco

X_4 = Capital

X_5 = Management quality

e = error term that captures unexplained variations in the model

Table 3.1 Operationalization of study variables

Notation	Variables	Measure
Y	Technical Efficiency	Output/Input Where Inputs= Savings & Total Expenses And Outputs = Loans & Total Income (Adapted from DEA model)
X ₁	Number of M-sacco transactions yearly	Logarithm of number of transactions- $\log e^x$
X ₂	Investment on M-Sacco service(in Ksh)	Ratio of Asset invested on M-Sacco to Total asset
X ₃	Size of SACCO	Logarithm of total assets
X ₄	Capital	Equity to Total Asset
X ₅	Management quality	Non-interest expenses to Total assets

3.5.2 Test of Significance

The absolute values of the independent variables were converted to ratio scale by taking the natural logarithm. Test of goodness of fit was done by co-efficient of determination R^2 . Test of significance was done by Pearson's product moment correlation co-efficient, r . Other test done include Analysis of Variance, ANOVA.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the information processed from the data collected during the study on the effect of mobile SACCO on financial performance of licensed deposit taking SACCOS in Nairobi County.

4.2 Descriptive Analysis

Table 4.1: Descriptive Statistics of the Study Variables

	Min	Max	Mean	Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Number of M-SACCO transactions	4.57	4.94	3.87	0.66	5.86	0.246	.717	0.482
Investment in M-SACCO service	5.585	9.298	7.576	0.984	-0.171	0.268	0.963	0.043
Size of Sacco	0.246	23.133	9.504	2.943	3.895	0.225	-0.598	0.449
Capital	.0121	1.8316	0.3379	.3432	1.709	.187	2.804	.373
Management quality	0.482	0.396	0.003	0.139	0.492	0.257	4.066	0.343
Financial performance (measured by efficiency)	0.03	1.00	0.620	0.196	-0.177	0.276	-0.993	0.044

Source: Research Data

The results in Table 4.1 showed that number of M-SACCO transactions which was calculated as a log of number of M-SACCO had a mean of 3.87, investments in M-SACCO service had a mean score of 7.576, and capital had a mean score of 0.3379 while Management quality had a mean score of 0.003. Analysis of skewness shows that financial performance and firm size are asymmetrical to the right.

Table 4.2: Summary of efficiency

Year	Minimum	Maximum	Mean	Std. Deviation
2011	0.22	1.00	0.5998	0.159
2012	0.03	0.95	0.4583	0.242
2013	0.17	1.00	0.6646	0.185
2014	0.29	0.95	0.7581	0.199

Source: Research Data

The financial performance of licensed deposit taking SACCOS in Nairobi County increased steadily as shown in the efficiency table above. 2012 had the lowest mean of 0.4583 efficiency while 2014 had the highest mean of 0.7581.

4.3 Regression Analysis

The study conducted a cross-sectional multiple regression on several determinants over the period 2011 - 2014 and of financial performance of licensed deposit taking SACCOS in Nairobi County. Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (financial performance of licensed deposit taking SACCOS in

Nairobi County) that is explained by all the four independent variables (Size, capital, credit risk and management quality).

Table 4.3: Results of multiple regression between financial performance and the combined effect of the selected predictors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.828	0.686	0.658	0.242

Source: Research Data

The four independent variables that were studied, explain only 65.8% of the financial performance of licensed deposit taking SACCOS in Nairobi County as represented by the adjusted R^2 . This therefore means the four variables contribute to 65.8% of financial performance of licensed deposit taking SACCOS in Nairobi County, while other factors not studied in this research contributes 34.2% of financial performance of licensed deposit taking SACCOS in Nairobi County in Nairobi County. Therefore, further research should be conducted to investigate the other (34.2%) factors influencing financial performance of licensed deposit taking SACCOS in Nairobi County.

Table 4.4: Summary of One-Way ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.700	5	.540	3.803	.002 ^a
	Residual	5.116	36	.142		
	Total	7.816	41			

Source: Research Data

From the ANOVA statistics in table 4.4, the processed data, which are the population parameters, had a significance level of .002 which shows that the data is ideal for making a conclusion on the population's parameter. The F calculated at 5% Level of significance was 3.810. Since F calculated is greater than the F critical (value = 2.90), this shows that the overall model was significant i.e. there is a significant relationship between efficiency and its determinants.

Table 4.5: Regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.169	0.000	0.115	1.455	.421
	Number of transactions	0.020	0.225	.007	4.019	.020
	Investment in M-Sacco service	0.153	0.133	.087	5.023	.008
	Size of Sacco Capital	-0.121	0.787	-2.549	-5.437	.011
	Management quality	0.178	0.311	.024	4.824	.013
		0.407	0.179	.376	3.387	.023

Dependent variable: financial performance of licensed deposit taking SACCOS in Nairobi County

Source: Research Data

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

$$FP = 0.169 + 0.020NT + 0.153 IS - 0.121SS + 0.178 CAP + 0.407MQ$$

Where FP is financial performance, NT is the number of transactions, IS is the investment in m-sacco service, SS is the size of SACCO, CAP is the capital and MQ management quality. According to the model, all the variables were significant as their significance value was less than 0.05. However, Size of Sacco was negatively correlated with financial performance of licensed deposit taking SACCOS in Nairobi County while Number of M-Sacco transactions carried out, Investment in M-Sacco service, capital and management quality were positively correlated with financial performance of licensed deposit taking SACCOS in Nairobi County. From the model, taking all factors (Number of M-SACCO transactions carried out, investment in M-SACCO service, size of SACCO, capital and management quality) constant at zero, financial performance of licensed deposit taking SACCOS in Nairobi County will be 0.169.

The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in Number of M-Sacco transactions carried out will lead to a 0.020 increase in financial performance of licensed deposit taking SACCOS in Nairobi County; a unit increase in Investment in M-Sacco service will lead to a 0.153 increase in financial performance of licensed deposit taking SACCOS in Nairobi County; a unit increase in Size of Sacco will lead to a 0.121 decrease in financial performance of licensed deposit taking SACCOS in Nairobi County; a unit increase in capital will lead to a 0.178 increase in financial performance of licensed deposit taking SACCOS in Nairobi County while a unit increase in management quality will lead to a 0.407 increase in financial performance of licensed deposit taking SACCOS in Nairobi County. This infers that management quality contributed most to the financial performance of licensed deposit taking SACCOS in Nairobi County followed by number of transactions and the capital. Investment in the service had the least contribution to the financial performance of licensed

deposit taking SACCOS in Nairobi while the Size of Sacco had a negative significant effect on the financial performance of licensed deposit taking SACCOS in Nairobi County.

4.4 Correlation Analysis

Table 4.3: Correlation Matrix

		Financial performance	Investment in M-sacco services	Number of M-sacco transactions	Size of the SACCO	Capital	Management quality
Financial performance	Pearson Correlation	1					
	Sig. (2-tailed)						
Investment in M-sacco services	Pearson Correlation	.578*	1				
	Sig. (2-tailed)	.025					
Number of M-sacco transactions	Pearson Correlation	.311*	.201	1			
	Sig. (2-tailed)	.029	.029				
Size of the SACCO	Pearson Correlation	.471*	.984	-.975	1		
	Sig. (2-tailed)	.039	.137	.091			
Capital	Pearson Correlation	.732**	.108	.008	-.049	1	
	Sig. (2-tailed)	.001	.638	.954	.720		
Management quality	Pearson Correlation	.631**	.108	.008	-.049	.136	1
	Sig. (2-tailed)	.004	.638	.954	.720	.545	
	N	41	41	41	41	41	41

*. Correlation is significant at the 0.05 level (2-tailed); **. Correlation is significant at the 0.01 level (2-tailed).

The study sought to establish the relationship between Number of M-Sacco transactions, Investment in M-sacco services, Size of the SACCO, Capital, Management quality and the financial performance of the Deposit taking savings and credit co-operations. Pearson Correlation analysis was used to achieve this end at 99% and 95% confidence levels. Table 4.3 shows significant, positive but good linear relationships between financial performance and: Investment in M-sacco services ($R = .578$, $p = .025$) and Number of M-sacco transactions ($R = .311$, $p = .029$). A positive correlation coefficient was established between financial performance and the Size of the SACCO ($R = .471$, $p = .039$), capital ($R = .732$, $p = .001$). and management quality ($R = .631$, $p = .004$).

4.5 Interpretation of Findings and Discussions

From the above regression model, the study found out that there were factors influencing the financial performance of licensed deposit taking SACCOS in Nairobi County, which are Number of M-SACCO transactions carried out, investment in M-SACCO service, size of SACCO, capital and management quality. They either influenced it positively or negatively. The study found out that the intercept was 0.169 for all years.

The five independent variables that were studied (Number of M-SACCO transactions carried out, investment in M-SACCO service, size of SACCO, capital and management quality) explain a substantial 65.8% of financial performance of licensed deposit taking SACCOS in Nairobi County as represented by adjusted R^2 (0.658). This therefore means that the five independent

variables contributes 65.8% of the financial performance of licensed deposit taking SACCOS in Nairobi County while other factors and random variations not studied in this research contributes a measly 34.2% of the financial performance of licensed deposit taking SACCOS in Nairobi County.

The study found out that the coefficient for Number of M-Sacco transactions carried out was 0.020, meaning that Number of M-Sacco transactions carried out positively and significantly influenced the financial performance of licensed deposit taking SACCOS in Nairobi County. This is correlates with Tchouassi (2012) who sought to find out whether mobile phones really work to extend banking services to the unbanked using empirical Lessons from Selected Sub-Saharan Africa Countries. The study noted that poor, vulnerable and low-income households in Sub-Saharan Africa (SSA) countries often lacked access to bank accounts and faced high costs of conducting basic financial transactions. Okiro and Ndungu (2013) investigated the impact of mobile and internet banking transactions on performance of financial institutions in Kenya. The study found that SACCOS had the highest rate of usage of mobile banking and that the usage of mobile banking among financial institutions was moderate among the microfinance institution. The M-SACCO presented a great opportunity for the provision of financial services to the unbanked. In this regard, Number of M-Sacco transactions carried out from Selected Sub-Saharan Africa Countries over the period recorded a significant increase indicating that the number of M-Sacco transactions carried out has a positive influence on financial performance on of licensed deposit taking SACCOS in Nairobi County.

The study also found that the coefficient for Investment in M-Sacco service was 0.153, meaning Investment in M-Sacco service positively and significantly influenced financial performance of licensed deposit taking SACCOS in Nairobi County. This is consistent with Oyugi (2014) who

found that majority of the financial institutions had invested in internet banking services, mobile banking and ATM services to increase their financial performance. Olando, Jagongo and Mbewa (2013) also in their investigation of the contribution of Sacco financial stewardship to growth of SACCOS in Kenya found that Sacco financial growth in Kenya is mainly driven by, diversified investments in innovativeness of Sacco products. On the other hand, Okiro and Ndung'u (2013) noted that due to the tremendous growth of the mobile phone industry, most financial institutions have invested into the untapped opportunity and have partnered with mobile phone network providers to offer banking services to their clients. In this study, M-Sacco service product will be measured by the number of transactions.

The study established that the coefficient for of the Size of Sacco to be negative -0.121, meaning that the Size of Sacco negatively and significantly influenced on financial performance of licensed deposit taking SACCOS in Nairobi County. This concurs with Ab-Rahim et al. (2012) who found a negative relationship between Size of Sacco and the measures of efficiency. This however contradicts earlier findings by Ab-Rahim et al. (2012) who indicated that Size of Sacco variable was expected to have a positive relationship with efficiency which implies that firms with higher loans to asset ratio tend to have higher efficiency score.

The study also established that the coefficient for capital was 0.178; capital positively and significantly influenced financial performance of licensed deposit taking SACCOS in Nairobi County. This results correlates with prior research by Mwangi (2013) who investigated the determinants of efficiency of savings and credit co-operative (SACCO) societies in Nairobi County. The study found out that there were factors influencing the financial performance of licensed deposit taking SACCOS in Nairobi County, which are size, capital, credit risk and management quality. The study concluded that size, capitalization and management quality

positively and significantly influenced financial performance of licensed deposit taking SACCOS in Nairobi County while credit risk inversely affected financial performance of licensed deposit taking SACCOS in Nairobi County. Ssebaale (2011) also investigated and concluded that for SACCOS to achieve a desired level of outreach in terms of depth and breadth, they should be in a position to cover loan write-offs, have their retained earnings rising every year and reduce the default rate. Also the SACCOS should adopt the right financing strategies if they are to achieve the desired levels of financial sustainability.

The study also established that the coefficient for management quality was 0.407; meaning management quality positively and significantly influenced financial performance of licensed deposit taking SACCOS in Nairobi County. This result correlates with prior research by Kiaritha et al (2014) who found effective policies adopted by SACCOS to managing their operating costs had a significant effect on financial performance of SACCOS in the banking sector in Kenya. Ssebaale (2011) also investigated financial strategies, financial sustainability and outreach of SACCOS in Uganda and found that a significant positive relationship existed between financing strategies and financial sustainability and also between financing strategies and outreach of SACCOS. However, Okiro and Ndung'u (2013) found that mobile banking faced various challenges, for example, system delays by the mobile money transfer service providers, slow processing of transactions especially on weekends, high transaction costs, limits pertaining to the amount of money that can be withdrawn in a day and fraud which is a drawback to better financial performance of SACCO's.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary, conclusion and recommendations of the main findings on the effect of Mobile Sacco Service on financial performance of licensed deposit taking SACCOS in Nairobi County.

5.2 Summary of Findings

SACCOS have developed rapidly in terms of size, structure and variety of products and services by embracing technology to increase the speed of transactions, give clients more flexibility and reduce costs of doing business. With the introduction of M-Sacco, it is expected that the SACCOS' financial performance will improve as the SACCOS' avail their services to their members on the mobile platform thus increasing the volume of their transactions. Therefore, the mobile Sacco service is expected to be positively related to financial performance of SACCOS. The study sought to establish the effect of Mobile Sacco service on the financial performance of licensed deposit taking SACCOS in Nairobi County with a focus on all 42 licensed deposit taking SACCOS in Nairobi County. The secondary data in this analysis covered a period of 4 years (2011 – 2014) and extracted from the audited financial statements which included comprehensive income statement and Statement of financial position. Data was analyzed using a linear regression equation model to establish the effect of Mobile Sacco service on financial performance of SACCOS in Nairobi County. From the regression model, the study found out that there were factors influencing the financial performance of licensed deposit taking SACCOS in Nairobi County, which are Number of M-SACCO transactions carried out, investment in M-

SACCO service, size of SACCO, capital and management quality. They either influenced it positively or negatively. The five independent variables that were studied (Number of M-SACCO transactions carried out, investment in M-SACCO service, size of SACCO, capital and management quality) explain a substantial 65.8% of financial performance of licensed deposit taking SACCOS in Nairobi County as represented by the adjusted R^2 (0.658). The study concludes that Number of M-SACCO transactions carried out, investment in M-SACCO service, size of SACCO, capital and management quality significantly influenced the financial performance of licensed deposit taking SACCOS in Nairobi County. The study therefore recommends that SASRA should enhance the authority's regulations such as ensuring safety and security of member's deposits through establishment and implementation of the Deposit Guarantee Fund (DGF), increased savings and credit due to stability in the Sacco sub-sector. The study also recommends that SACCO managers should have training programs on application of business process automation to promote growth and development of skills and technical capacities within the Sacco sub-sector since it is through the business process automation that has led to mobile banking being used in the delivery of services to members of SACCOS.

5.3 Conclusions

The study sought to establish the effect of Mobile Sacco service on the financial performance of licensed deposit taking SACCOS in Nairobi County. The study concludes that Number of M-Sacco transactions carried out positively and significantly influenced the financial performance of licensed deposit taking SACCOS in Nairobi County as larger firms are able to spread the fixed costs of production over more production units leading to lower average costs. The study also concludes that Investment in M-Sacco services positively and significantly influence the financial performance of licensed deposit taking SACCOS in Nairobi County with majority of the

SACCOS investing in internet banking services, mobile banking and ATM services to increase their financial performance. The study also concludes that capital positively and significantly influenced financial performance of licensed deposit taking SACCOS in Nairobi County. The study further concludes that management quality positively and significantly influenced financial performance of licensed deposit taking SACCOS in Nairobi County. The study finally concludes that the relationship between Size of Sacco and financial performance of licensed deposit taking SACCOS in Nairobi County is negative and significant.

5.4 Limitations of the Study

The study faced limitations. Obtaining data from the SASRA and SACCOs was a great challenge and the management in the SASRA and the SACCOs were uncooperative, however the researcher explained that the data that was to be obtained was for academic purpose only.

In attaining its objective the study was limited to 42 licensed deposit taking SACCOS in Nairobi County from the year 2011 up to the year 2014. The study was also limited to the degree of precision of the data obtained from the SACCOs financial reports.

The study also faces challenges of time resources limiting the study from collecting information for the study particularly where the SACCOs management delayed giving the SACCOs financial reports. To mitigate this, the researcher made often follow up and enhanced collection of sufficient data from the SACCOs.

The study was further constrained by limited financial and time resources. The researcher had to draw a time schedule and a budget that would enable the study to be completed using the budget drawn and within the required time of the study. There were also challenges which were

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

5.5 Recommendations

5.5.1 Policy Recommendations

The study recommends that Mobile Sacco services should be used as a complement to, rather than a substitute for, physical branches. This is because most of the people in the rural areas are not able to access the Mobile Sacco services owing to their level of technology literacy. The study also recommends that there is need to understand the changes that Mobile Sacco services brings on the Saccos in order to examine in detail how the recent and foreseeable advances in technology is affecting the various aspects of the Saccos and can affect its future evolution.

Since adoption of ICT improves the Sacco's image and leads to a wider, faster and more efficient market, it is imperative for Saccos management to intensify investment in ICT products to facilitate speed, convenience, and accurate services, or otherwise lose out to their competitors.

To facilitate and improve Mobile Sacco services in Kenya and other developing countries, there is need to address the internal factors through awareness creation, training, improving organization, enhance and assure security, reliability, confidence and improve risk taking propensity by potential adopters. Training and Manpower development is a major problem mitigating against the growth of automation of service in Saccos in the country. Government must make right IT policy by ensuring that Computer, Communication equipments and other IT infrastructures to a large extent have manufactures in the country so that our people can acquire first hand necessary skills.

The study also recommends that since Number of M-Sacco transactions carried out was found to have a positive and significant effect on the financial performance of licensed deposit taking SACCOS in Nairobi County, there is need to understand the changes that technology was causing on the financial sector in order to examine in detail how the recent and foreseeable advances in technology can affect its future evolution. Since adoption of ICT improves the SACCOS image and leads to a wider, faster and more efficient market, it is imperative for SACCOS management to intensify investment in ICT products to facilitate speed, convenience, and accurate services.

5.5.2 Suggestions for Further Research

Since the study focused on the effect of Mobile Sacco services on the financial performance of deposit taking SACCOS in Nairobi County licensed by Sacco Society Regulatory Authority in Kenya, further studies should be done on all Savings and Credit Co-operative Societies to allow for generalization of findings for the Kenyan Savings and Credit Co-operative Societies.

Further studies should also be done on the challenges that affect the Mobile Sacco services among deposit taking SACCOS in Nairobi County licensed by Sacco Society Regulatory Authority in Kenya since it is not fully employed despite previous studies showing it is beneficial in customer acquisition.

The study also recommends that further studies should be done on the effect of other factors affecting financial performance in the SACCOS such as number of branches, number of customers, level of technological adoption among others. A similar study should also be done whereby the data collection relies on primary data i.e. in-depth questionnaires and interview guide so as to complement this study.

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APPENDICES

Appendix I: Deposit Taking Sacco Societies Licensed by SASRA For The Period Ending December, 2015

1. Afya Sacco Society Limited	22. Mwito Sacco Society Limited
2. Airport Sacco Society Limited	23. Nacico Sacco Society Limited
3. Asili Sacco Society Limited	24. Nafaka Sacco Society Limited
4. Ardhi Sacco Society Limited	25. Naku Sacco Society Limited
5. Chai Sacco Society Limited	26. Nassefu Sacco Society Limited
6. CHUNA Sacco Society Limited	27. Nation Sacco Society Limited
7. Comoco Sacco Society Limited	28. Nest Sacco Society Limited
8. Elimu Sacco Society Limited	29. Safaricom Sacco Society Limited
9. Fundilima Sacco Society Limited	30. Shirika Sacco Society Limited
10. Harambee Sacco Society Limited	31. Sheria Sacco Society Limited
11. Hazina Sacco Society Limited	32. Stima Sacco Society Limited
12. Jamii Sacco Society Limited	33. Telepost Sacco Society Limited
13. Kenpipe Sacco Society Limited	34. Transcom Sacco Society Limited
14. Kenversity Sacco Society Limited	35. Ufundi Sacco Society Limited
15. Kenya Bankers Sacco Society Limited	36. Ufanisi Sacco Society Limited
16. Kenya Police Staff Sacco Society Limited	37. Ukruisto Na Ufanisi Sacco Society Limited
17. Kingdom Sacco Society Limited	38. Ukulima Sacco Society Limited
18. Magereza Sacco Society Limited	39. United Nations Sacco Society Limited
19. Maisha Bora Sacco Society Limited	40. Wanaanga Sacco Society Limited
20. Miliki Sacco Society Limited	41. Wanandegge Sacco Society Limited
21. Mwalimu National Sacco Society Limited	42. Waumini Sacco Society Limited

Appendix II: Research Data

TOTAL ASSETS

	2011	2012	2013	2014
Afya	9,351,710,222	10,848,416,703	11,885,165,364	12,682,654,633
Airports	304,519,000	353,238,243	421,340,126	502,861,315
Ardhi	2,333,117,587	1,102,767,572	1,290,711,270	1,343,127,640
Asili	520,221,821	1,429,029,986	1,577,396,176	1,691,501,539
Chai	281,062,431	1,308,007,009	1,533,892,016	1,981,027,625
Chuna	1,128,394,366	1,414,235,675	1,740,316,114	1,925,519,198
Comoco	669,244,157	644,751,986	578,342,069	655,136,520
Elimu	985,605,796	644,751,986	644,751,986	845,271,149
Fundilima	469,334,000	514,418,826	554,181,465	562,937,728
Harambee	15,909,438,522	16,911,028,098	17,633,141,570	19,857,294,540
Hazina	1,260,339,954	2,977,957,920	3,574,790,356	4,317,912,170
Jamii	677,144,172	1,521,935,446	1,802,016,744	2,156,623,933
Kenpipe	4,567,763,043	1,267,536,296	1,461,652,953	1,633,256,462
Kenversity	1,385,702,083	954,091,573	1,101,343,093	1,221,067,564
Kenya Bankers	1,638,779,977	4,849,098,277	5,020,885,142	5,530,677,678
Kenya Police Staff	7,722,609,795	9,053,453,241	11,522,841,000	15,691,033,000
Kingdom	447,599,612	514,415,626	538,112,645	508,208,745
Magereza	1,536,791,658	3,707,062,247	3,824,156,740	4,213,387,707
Maisha bora	899,600,029	1,275,536,203	1,504,251,618	1,665,644,347
Miliki	2,486,564,472	4,987,062,247	5,639,156,740	6,321,387,707
Mwalimu National	19,104,255,837	22,008,054,783	24,540,360,723	28,600,607,935
Mwito	958,130,626	722,122,672	855,103,064	1,001,852,980
Nacico	1,219,588,295	2,364,652,350	2,151,267,592	2,474,217,185
Nafaka	812,605,415	1,348,371,022	2,130,630,266	2,466,495,973
Naku	1,285,702,083	1,153,346,509	1,497,683,660	1,776,195,431
Nassefu	3,181,763,043	991,584,157	937,057,087	970,172,109
Nation Staff	1,206,286,516	739,255,893	925,307,025	1,087,732,498
Nest	5,610,570,727	9,483,743,000	12,401,788,000	1,460,856,553
Safaricom	1,305,804,817	1,064,033,767	1,535,197,310	2,207,420,812
Sheria	1,214,334,580	2,324,091,802	2,835,831,928	3,386,341,463
Shirika	432,509,612	326,740,378	401,307,029	1,564,910,165

Stima	7,703,596,170	9,483,743,000	12,401,789,000	16,354,491,000
Teleposta	623,801,754	1,421,045,535	1,645,132,479	1,838,722,042
Transcom	624,136,421	463,840,378	72,707,029	79,410,165
Ufanisi	96,776,379	105,488,066	115,144,314	124,170,855
Ufundi	1,026,648,089	559,910,008	655,253,859	1,285,818,710
UkristonaUfanisi	263,553,712	528,382,212	783,000,675	931,234,975
Ukulima	4,287,259,898	6,420,421,725	7,442,982,245	7,954,961,401
UN	5,080,073,525	6,547,006,193	7,541,701,655	8,828,345,512
Wana-Anga	1,242,704,663	911,362,906	986,763,397	1,079,081,876
Wanandege	7,632,596,170	890,414,260	1,179,389,848	1,340,084,891
Waumini	951,927,251	1,648,371,022	2,130,630,266	2,466,495,973

TOTAL SAVINGS

	2011	2012	2013	2014
Afya	7,127,532,651	8,277,702,884	9,369,000,000	10,301,575,879
Airports	143,700,356	243,741,918	312,000,000	355,029,493
Ardhi	895,695,096	980,777,579	1,148,000,000	1,125,068,467
Asili	869,321,164	1,030,770,399	1,176,000,000	1,237,212,837
Chai	948,736,801	1,039,932,263	1,212,000,000	1,416,518,995
Chuna	1,234,599,736	1,034,757,852	1,192,000,000	1,296,255,998
Comoco	407,394,918	409,866,163	444,000,000	509,448,322
Elimu	555,001,445	555,829,483	650,000,000	625,345,500
Fundilima	370,184,090	410,163,237	448,000,000	453,640,545
Harambee	10,661,264,000	11,523,746,352	12,463,000,000	12,811,082,129
Hazina	1,735,087,901	2,520,075,615	3,006,000,000	3,526,141,250
Jamii	920,102,972	1,100,528,849	1,331,000,000	1,532,118,333
Kenpipe	893,467,742	1,033,090,327	1,171,000,000	1,302,138,657
Kenversity	794,349,031	281,820,645	912,000,000	1,054,056,814
Kenya Bankers	3,741,597,417	4,087,589,374	4,150,000,000	4,391,029,849
Kenya Police Staff	6,359,575,443	7,499,808,342	8,463,000,000	10,185,874,000
Kingdom	166,680,000	257,728,656	474,000,000	462,717,954
Magereza	2,100,841,367	2,818,454,015	3,138,000,000	2,829,079,390
Maisha bora	1,063,942,307	1,033,328,539	1,235,000,000	1,432,129,875
Miliki	39,286,829	42,025,752	34,000,000	35,482,105

Mwalimu National	15,420,454,000	16,660,475,898	18,557,000,000	19,903,134,406
Mwito	534,771,915	624,666,036	738,000,000	862,671,558
Nacico	880,583,493	992,877,095	1,247,000,000	1,466,013,416
Nafaka	217,501,562	226,674,053	236,000,000	265,096,377
Naku	772,431,152	1,041,580,444	1,211,000,000	1,386,048,982
Nassefu	583,333,199	627,611,610	628,000,000	705,159,262
Nation Staff	591,573,864	635,941,506	787,000,000	887,644,572
Nest	13,154,683	17,113,303	20,000,000	36,818,713
Safaricom	643,517,144	848,709,153	1,355,000,000	1,891,804,251
Sheria	1,439,289,601	1,789,287,060	2,107,000,000	2,511,750,503
Shirika	0	0	922,000,000	1,341,720,287
Stima	5,469,067,784	7,045,280,000	8,985,000,000	12,624,038,000
Teleposta	918,856,764	598,937,320	701,000,000	631,206,563
Transcom	255,932,802	280,469,000	328,000,000	280,469,000
Ufanisi	85,675,912	81,642,857	89,000,000	100,405,527
Ufundi	434,301,940	378,758,369	443,000,000	333,183,576
UkristonaUfanisi	239,697,481	488,694,419	709,000,000	801,615,187
Ukulima	4,165,983,617	5,131,888,665	5,514,000,000	6,004,712,254
UN	4,724,584,873	5,374,384,514	6,188,000,000	7,158,079,068
Wana-Anga	686,684,660	793,454,135	859,000,000	929,606,548
Wanandege	1,036,152,355	990,329,942	972,000,000	1,091,873,993
Waumini	1,186,155,336	1,301,493,142	1,824,000,000	1,856,455,371

TOTAL EXPENSES

	2011	2012	2013	2014
Afya	336,367,354	1,504,045,867	3,522,180,333	13,077,554,447
Airports	951,900	103,751,106	154,159,688	205,521,709
Ardhi	30,432,234	17,011,162	54,677,390	67,547,390
Asili	11,467,207	39,152,684	55,560,320	52,152,415
Chai	19,500,000	23,000,000	58,706,058	232,815,914
Chuna	11,183,200	12,713,459	14,271,359	18,684,485
Comoco	2,574,893	2,607,943	2,307,453	2,301,522
Elimu	54,759,085	85,329,197	14,095,928	74,095,928
Fundilima	62,595,311	29,078,320	41,000,000	39,524,875
Harambee	0	311,000,000	320,800,105	717,126,354

Hazina	4,678,509	10,925,769	64,769,759	33,331,825
Jamii	106,663,142	23,170,278	81,665,176	173,458,113
Kenpipe	7,772,806	4,772,806	2,988,772	14,767,949
Kenversity	52,041,837	21,243,752	10,925,769	15,259,769
Kenya Bankers	512,693,895	130,526,423	479,604,913	291,075,829
Kenya Police Staff	208,173,169	145,945,000	145,594,000	100,028,000
Kingdom	44,591,557	33,068,407	10,560,983	13,560,983
Magereza	3,037,787	6,871,460	10,197,201	15,197,201
Maisha Bora	30,432,234	32,624,385	58,081,427	55,081,427
Miliki	54,759,085	130,201,000	153,755,020	717,126,354
Mwalimu National	108,867,078	205,183,008	265,183,008	430,449,556
Mwito	8,519,532	8,819,562	10,959,031	17,011,162
Nacico	15,684,485	18,684,485	21,684,485	25,150,086
Nafaka	62,595,311	102,958,186	134,127,496	162,958,186
Naku	17,112,042	58,081,427	47,681,263	85,329,197
Nassefu	52,041,837	94,828,887	104,928,317	101,289,217
Nation Staff	55,339,295	52,301,522	104,564,699	95,912,462
Nest	1,263,895	1,569,883	8,000,000	8,000,000
Safaricom	24,932,000	37,755,020	58,471,259	87,672,785
Sheria	12,292,935	34,127,496	117,660,000	172,080,271
Shirika	44,591,557	129,374,998	108,684,485	129,374,998
Stima	103,891,699	107,583,380	111,171,930	211,663,000
Teleposta	2,301,522	380,088,267	365,826,312	395,826,312
Transcom	34,466,385	51,012,158	71,126,354	80,126,354
Ufanisi	11,660,000	33,331,825	33,331,825	90,883,736
Ufundi	173,458,113	153,120,000	285,412,367	413,120,000
Ukruisto Na Ufanisi	13,481,442	24,492,491	29,705,829	31,075,829
Ukulima	46,613,814	100,028,000	220,170,408	495,466,561
UN	47,431,522	144,928,317	235,361,536	209,885,233
Wana-Anga	7,000,000	8,000,000	102,033,954	50,913,547
Wanandege	5,174,864	7,821,463	12,584,625	21,574,864
Waumini	10,548,265	14,767,949	25,146,875	36,852,569

TOTAL LOANS

	2011	2012	2013	2014
Afya	7,081,776,053	7,829,446,962	8,705,945,811	10,051,159,677
Airports	148,428,090	234,492,410	305,472,818	364,277,002
Ardhi	884,883,879	980,832,900	736,763,241	1,153,425,290
Asili	979,035,932	1,042,522,806	1,124,864,151	1,103,024,933
Chai	1,011,824,522	1,101,548,355	1,413,000,000	1,805,583,154
Chuna	1,422,104,699	1,338,246,206	1,723,456,110	1,870,294,871
Comoco	405,440,379	414,746,206	447,585,368	524,673,255
Elimu	603,421,868	438,881,291	27,000,000	583,036,628
Fundilima	387,785,707	416,379,500	459,000,000	447,107,953
Harambee	13,020,437,982	14,312,515,779	14,253,985,637	15,988,074,871
Hazina	1,660,203,086	2,621,957,920	3,032,823,609	3,571,664,168
Jamii	1,065,769,946	1,285,051,362	1,588,427,782	1,819,104,536
Kenpipe	1,051,744,562	1,157,589,090	1,275,692,130	1,363,887,475
Kenversity	754,023,384	318,026,558	984,000,000	1,099,546,271
Kenya Bankers	3,176,439,527	3,491,494,004	3,431,770,070	3,658,221,340
Kenya Police Staff	6,063,646,820	7,518,407,821	10,181,363,000	12,653,791,000
Kingdom	145,894,000	198,248,807	378,000,000	436,486,350
Magereza	2,539,144,663	2,126,838,796	2,677,000,000	2,548,000,000
Maisha Bora	1,214,840,798	1,154,518,498	1,366,000,000	1,559,868,054
Miliki	36,234,447	47,811,861	47,000,000	33,814,151
Mwalimu National	17,606,221,180	18,989,080,942	21,053,000,000	22,113,840,311
Mwito	616,755,316	663,915,455	818,625,243	917,512,427
Nacico	1,374,105,251	1,329,294,871	1,614,000,000	1,210,752,721
Nafaka	221,149,600	218,089,127	183,000,000	284,171,909
Naku	899,600,028	838,975,799	1,201,000,000	1,333,646,788
Nassefu	784,572,119	810,617,947	740,000,000	832,286,504
Nation Staff	677,144,172	655,491,547	789,000,000	1,007,215,206
Nest	12,850,355	27,628,001	4,000,000	33,595,103
Safaricom	958,130,542	917,076,721	1,299,000,000	1,996,567,897
Sheria	1,410,291,429	1,845,626,025	2,312,000,000	2,641,689,355
Shirika	0	0	0	1,236,678,713
Stima	6,292,002,888	8,109,143,000	10,619,000,000	13,686,986,000
Teleposta	1,089,144,625	960,029,256	524,673,255	740,241,504
Transcom	469,604,913	288,272,380	280,000,000	207,668,564

Ufanisi	85,594,000	90,537,611	99,000,000	120,408,437
Ufundi	669,244,737	257,077,507	48,000,000	251,091,559
Ukruisto Na Ufanisi	235,446,278	441,321,599	784,000,000	867,108,810
Ukulima	4,093,488,281	5,308,059,416	5,681,000,000	6,211,732,428
UN	4,832,582,691	5,840,225,640	6,505,000,000	7,133,226,729
Wana-Anga	812,600,028	776,076,398	790,000,000	813,373,386
Wanandege	586,452,555	606,679,339	582,000,000	702,306,559
Waumini	1,103,004,043	1,296,887,475	1,637,000,000	2,065,258,749

TOTAL INCOME

	2011	2012	2013	2014
Afya	1,458,906,392	1,725,006,529	1,651,292,239	1,754,532,809
Airports	44,361,745	47,805,134	54,406,895	59,723,311
Ardhi	63,909,975	102,549,917	117,585,600	133,909,975
Asili	122,790,146	151,965,766	198,013,096	237,805,251
Chai	180,792,602	165,508,406	214,509,424	239,316,026
Chuna	134,162,746	148,751,419	205,689,371	243,184,631
Comoco	29,679,727	41,499,655	17,337,867	62,332,482
Elimu	99,892,174	108,772,128	126,514,395	143,215,736
Fundilima	62,951,419	65,941,990	72,391,900	79,904,487
Harambee	1,088,959,807	1,435,280,000	1,671,000,000	1,711,839,229
Hazina	217,190,334	347,439,720	384,384,320	521,454,459
Jamii	160,207,828	197,002,153	287,597,731	345,697,234
Kenpipe	130,356,347	163,747,058	188,565,833	207,684,081
Kenversity	145,703,420	128,745,245	159,317,558	165,025,863
Kenya Bankers	189,016,668	237,806,000	473,136,000	557,184,612
Kenya Police Staff	1,374,597,322	1,391,758,696	1,579,178,088	1,588,421,561
Kingdom	54,243,978	57,594,395	58,007,909	71,406,782
Magereza	203,210,792	160,793,100	389,719,594	441,511,237
Maisha bora	107,026,713	131,932,573	159,986,854	178,922,725
Miliki	16,686,877	18,406,197	20,071,760	23,614,108
Mwalimu National	1,881,311,001	1,936,636,000	2,908,276,000	3,510,000,000
Mwito	36,629,624	50,030,244	72,057,669	98,629,624
Nacico	273,412,185	303,094,114	288,545,077	319,667,359
Nafaka	25,039,770	29,817,140	41,597,121	42,147,453
Naku	205,459,600	121,057,789	174,756,717	231,628,799

Nassefu	100,302,414	175,576,069	172,629,624	203,905,256
Nation Staff	94,125,424	98,209,441	100,737,069	102,735,080
Nest	12,240,045	12,888,790	14,113,680	15,000,000
Safaricom	97,323,738	131,012,762	136,389,284	166,581,169
Sheria	252,456,321	356,939,728	311,872,790	435,723,471
Shirika	123,854,874	165,254,985	226,433,293	248,212,987
Stima	1,343,074,530	1,583,643,454	1,654,020,004	1,629,476,468
Teleposta	56,523,981	111,666,310	129,771,790	147,522,798
Transcom	23,635,723	32,849,926	42,853,513	45,280,589
Ufanisi	14,608,715	17,548,870	18,781,599	19,244,030
Ufundi	46,579,533	54,166,996	65,860,732	71,278,828
UkristonaUfanisi	63,563,410	88,610,028	94,754,964	107,932,262
Ukulima	479,798,020	547,136,323	612,408,893	798,783,918
UN	653,537,146	859,853,116	1,102,519,963	1,390,299,381
Wana-Anga	67,521,362	103,573,909	129,188,466	145,368,011
Wanandege	102,517,290	203,303,298	163,489,540	154,961,554
Waumini	91,116,765	126,891,639	174,660,272	198,351,242

EQUITY

	2011	2012	2013	2014
Afya	1,896,321,562	2,033,375,168	2,858,805,812	3,684,236,456
Airports	306,478,123	338,542,671	350,564,294	357,003,818
Ardhi	1,021,662,000	1,037,534,000	1,049,548,000	1,160,335,000
Asili	172,993,916	198,657,285	275,700,518	352,743,751
Chai	39,486,261	58,986,138	92,526,169	126,066,200
Chuna	123,822,711	120,785,582	119,505,961	120,226,340
Comoco	192,528,048	157,700,479	155,656,248	153,612,017
Elimu	426,408,373	437,070,054	459,257,339	474,744,624
Fundilima	391,229,704	454,737,458	553,956,902	653,176,346
Harambee	1,998,051,736	2,998,899,069	3,687,476,041	4,376,053,013
Hazina	300,110,464	282,042,007	473,238,133	664,434,259
Jamii	64,777,056	104,439,601	111,822,140	119,204,679
Kenpipe	125,985,508	135,111,195	183,217,121	231,323,047
Kenversity	89,791,814	129,253,034	154,311,005	179,368,976
Kenya Bankers	500,562,993	618,849,000	655,138,000	691,427,000
Kenya Police Staff	1,356,258,963	1,212,934,635	1,207,662,889	1,202,391,143

Kingdom	326,487,123	398,542,671	405,642,894	457,003,818
Magereza	391,229,704	454,737,458	553,956,902	653,176,346
Maisha bora	150,234,500	515,299,212	119,511,804	276,275,604
Miliki	685,643,468	551,665,682	676,222,874	700,780,066
Mwalimu National	1,811,955,294	2,402,709,943	3,470,588,260	4,538,466,577
Mwito	608,940,688	108,740,033	105,581,678	102,423,323
Nacico	377,709,315	393,549,437	445,744,382	497,939,327
Nafaka	417,709,315	493,549,437	505,744,382	555,275,960
Naku	137,957,816	242,032,447	246,413,937	250,795,427
Nassefu	120,832,533	150,273,964	79,547,217	108,820,470
Nation Staff	563,124,896	339,404,000	112,043,279	115,317,442
Nest	130,234,500	135,299,212	149,511,804	206,905,527
Safaricom	255,602,169	393,642,600	480,576,593	567,510,586
Sheria	132,369,852	136,976,944	175,205,609	213,434,274
Shirika	125,648,234	135,814,562	183,286,542	221,642,954
Stima	2,506,964,531	2,856,321,478	3,026,541,236	3,196,760,994
Teleposta	574,099,919	605,496,438	663,328,752	721,161,066
Transcom	39,419,428	42,357,951	67,523,146	99,528,412
Ufanisi	28,540,768	45,424,029	96,074,105	146,724,181
Ufundi	925,662,000	1,025,543,000	1,094,448,000	1,160,353,000
UkristonaUfanisi	100,832,533	115,273,964	129,547,217	130,820,470
Ukulima	277,085,185	508,875,791	833,900,922	1,158,926,053
UN	209,419,428	255,602,169	392,364,230	412,996,492
Wana-Anga	613,217,763	674,955,283	926,294,646	1,177,634,009
Wanandege	1,025,662,000	1,038,543,000	1,149,448,000	1,260,353,000
Waumini	392,895,732	412,664,818	533,970,389	555,275,960

NUMBER OF MOBILE SACCO TRANSACTIONS

	2011	2012	2013	2014
Afya	37123	38962	39016	39398
Airports	1310	1432	1485	1523
Ardhi	8085	10003	7844	46910
Asili	10358	11009	11209	11505
Chai	8899	8908	9727	9851

Chuna	2592	4598	4538	7208
Comoco	0	0	738	2830
Elimu	5396	12279	20026	22266
Fundilima	1562	6096	6156	6696
Harambee	10808	49347	80851	86934
Hazina	12758	13521	14475	15396
Jamii	11754	14180	15373	15926
Kenpipe	1471	1607	1687	2279
Kenversity	0	1455	2840	4140
Kenya Bankers	6830	27847	31735	34847
Kenya Police Staff	24581	30155	37100	47155
Kingdom	2279	9333	9737	9937
Magereza	10961	13851	16255	29851
Maisha Bora	5455	7208	8012	8693
Miliki	14883	18745	25946	27387
Mwalimu National	3584	22664	57277	60961
Mwito	0	1609	3427	5455
Nacico	532	1523	12523	14435
Nafaka	14435	20851	31277	38851
Naku	10252	12197	13931	14883
Nassefu	2710	5396	9336	15396
Nation Staff	1740	9333	14097	15271
Nest	5174	16260	47976	57276
Safaricom	2430	3108	4214	7214
Sheria	7420	18146	26468	29451
Shirika	2430	6618	14482	18842
Stima	12831	16830	25246	49843
Teleposta	1831	3910	5844	7044
Transcom	7420	2279	10046	10046
Ufanisi	33387	51563	60961	61563
Ufundi	3969	5455	8840	9370
Ukruisto Na Ufanisi	1990	2230	4190	7883
Ukulima	1336	15396	20387	23159
UN	3969	4105	8976	10571
Wana-Anga	1990	2477	4482	3614

Wanandegge	3674	5017	5801	6333
Waumini	3956	15626	17486	25375

NON INTEREST EXPENSE

	2011	2012	2013	2014
Afya	79,312	114,890	820,663	947,255
Airports	51,900	75,106	159,688	552,179
Ardhi	432,234	111,162	546,390	1,467,207
Asili	354,377	336,045	378,460	310,050
Chai	620,892	368,881	528,134	232,815
Chuna	229,653	378,752	4,380,894	66,529
Comoco	197,383	705,660	515,170	498,529
Elimu	263,870	415,984	436,525	286,039
Fundilima	59,311	78,320	100,000	584,236
Harambee	72,383	75,263	966,708	108,835
Hazina	81,580	37,556	288,962	726,325
Jamii	399,267	108,592	218,591	345,811
Kenpipe	57,715	20,500	214,940	471,552
Kenversity	98,543	360,881	564,711	300,867
Kenya Bankers	67,895	670,228	308,149	444,413
Kenya Police Staff	41,210	469,966	912,585	303,551
Kingdom	591,557	68,407	60,983	230,551
Magereza	3,037,787	6,871,460	1,051,972	1,218,421
Maisha Bora	913,195	627,143	614,876	657,729
Miliki	149,230	516,086	598,761	396,710
Mwalimu National	83,565	373,530	61,045	642,252
Mwito	131,050	825,175	671,806	544,303
Nacico	679,867	718,550	301,193	556,477
Nafaka	259,531	262,958	341,275	629,582
Naku	128,223	661,695	429,734	113,045
Nassefu	107,366	733,305	697,087	776,380
Nation Staff	280,804	325,505	76,791	81,645
Nest	158,245	169,883	200,000	382,145
Safaricom	631,428	32,563	188,939	185,498
Sheria	539,374	325,518	632,619	720,803
Shirika	91,557	374,998	186,485	96,485

Stima	389,170	175,834	111,172	129,723
Teleposta	906,507	719,828	459,526	748,700
Transcom	466,385	112,158	126,354	102,635
Ufanisi	495,718	492,451	110,239	316,980
Ufundi	334,744	120,000	173,113	573,113
Ukruisto Na Ufanisi	481,442	492,491	75,829	267,529
Ukulima	123,640	100,280	865,153	171,127
UN	481,261	482,371	495,709	509,867
Wana-Anga	25,881	468,070	297,635	121,770
Wanandege	452,964	360,021	397,909	486,231
Waumini	64,525	28,380	212,441	326,877