IMPACT OF PRUDENTIAL REGULATORY FRAMEWORK ON FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCOS IN KENYA

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A RESEARCH PROJECT REPORT SUBMITTED TO THE DEPARTMENT OF BUSINESS AND ENTERPRENEURSHIP IN THE SCHOOL OF BUSINESS AND ECONOMICS IN PARTIAL FULFILMENT FOR THE REQUIREMENTS OF THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION OF SOUTH EASTERN KENYA UNIVERSITY

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DECLARATION

This research project report is my original work and has not been presented in any other University for academic credit

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I dedicate this work to my lovely wife Mrs Miriam Muinde and my daughters Joy Ndanu and June Beth. Their undying support and encouragement helped realize my academic pursuit of an MBA.

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ACRONYMS AND ABBREVIATIONS

DTS	Deposit Taking SACCOs
FI	Financial intermediary
GDP	Gross Domestic Product
LPR	Loan Provisioning Requirement
OECD	The Organization of Economic Development
SACCO's	Savings and Credit Co-operatives
SASRA	Sacco Societies Regulatory Authority
UFIRS	Uniform Financial Institutions Rating System
USA	United States of America
WOCCU	World Council of Credit Unions

DEFINITION OF TERMS

This study adopted the following definition of key terms:

Deposit Taking SACCOs	Savings and Credit Cooperatives that are licensed to take deposits from the investing public ((ICA 2007)
Financial Performance	This is output terms of the achievement of quantified objectives. For finance purposes these achievements are expressed in monetary terms (Auslander, 2008).
Prudential Regulatory Framework	An approach to financial regulation whose main aim is to mitigate the risk in financial systems (SASRA, 2008)
Regulation	This is described as the rules that have been put or govern a locality, organization, or process of doing something (Ruozi & Ferrari, 2013).

ABSTRACT

Regulation of the financial sector is critical aspect of consideration by the regulating authority. This is because the financial sector tremendously influences the performance of the entire economy. The study aims at determining the impact of a prudential regulatory framework on the financial performance of SACCOs in Kenya. The specific objectives in this case are; to determine the relationship between liquidity requirements and performance of deposit taking SACCOs in Kenya, to establish the relationship between capital requirements and performance of deposit taking SACCOs in Kenya, to investigate the relationship between loan provisioning requirements and performance of deposit taking SACCOs in Kenya, and to evaluate the relationship between minimum investment requirements and performance of deposit taking SACCOs in Kenya. The study reviewed literature under theoretical and empirical review. The theoretical review focused on portfolio theory, agency theory and stakeholder theory. The empirical review was done in line with the study objectives. The empirical review focused on past studies that have done in relation to the individual study variables. These reviews facilitated in creating an understanding of the available literature as well as in helping identify the existing research gap. The study adopted a descriptive survey design in addressing the research problem. The study was based in Kenya focusing on deposit taking SACCOs in the country. The population of the study was comprised of these deposit taking SACCOs in Kenya which are 181 in number. Since the study population was not significantly immense, all the elements in the population were used in the data collection exercise thus eliminating the need for sampling. The study used secondary data that was analyzed using quantitative data analysis techniques. The analyzed data was presented in figures, tables, and detailed discussions made. A regression model was also developed to test the relationship of the independent variable with the dependent variables. For the dependent variable return on investment was used to represent financial performance of deposit taking SACCOs in Kenya. On the other hand, prudential regulatory framework formed the independent variables which were specified as capital requirement, investment requirement, loan provisioning requirement, and liquidity requirement. An empirical analysis was thus done to determine how the four independent variables affected return on investment. Moreover, correlations and analysis of variance were done on the study variables and on the model as whole to determine the level of significance of each in the model. The study model was found to be significant in explaining the relationship between the independent variable and return on investment. The study found that the application of prudential regulatory requirement was even among all the SACCOs in Kenya. The study further found the implication of loan provisioning requirement was highest in influencing financial performance of SACCOs in Kenya. The four independent variables were found to have a positive relationship with return on investment. Liquidity were requirement was however found to have the least impact on financial performance on Deposit Taking SACCOs in Kenya holding the other variables constant. The study further recommended that SACCOs can re-evaluate their approach towards issuance of loans mainly because the level of non-performing loans was seen to be relatively higher that the prevailing levels on interest.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

According to the International Cooperative Alliance (ICA 2007), a cooperative is an autonomous association of people brought together on their own volition. The main uniting factor is being able to meet their economic, social, and cultural expectations through jointly owned and democratically controlled enterprise system. Marvin (2006) further found that the said co-operative values and principles have withstood the test of time. They offer the best model for tackling inequality and abject poverty in society. The fundamental principle behind advancement of the co-operative movement lies in the ability to pool scarce resources, remove middlemen and to thus move towards a common goal. Cooperative Societies derive their strength and validation from member's solidarity, cooperation and concern for the wellbeing of each other (Ministry of Cooperative Development and Marketing, 2007).

Savings and credit cooperatives differ from banks and do not operate under the same legislative environment. All SACCOs are a creation of individual's depositors, borrowers, & owners who join hand to provide financial services. These services are hitherto inaccessible to the same individuals; they are non-profit making institutions and have no external shareholders. This leads to limited ability to raise capital because the regulator does allow them access to capital markets (Marvin, 2206).

In Kenya, savings and credit cooperative societies have for a long time been managed under the Co-operative Societies Act Cap 490. According to Nyagah (2010), the co-operative values and principles have withstood the test of times and offer the best

model for fighting poverty and inequality in society. There is a universal view that cooperatives are the best mode for guiding socio-economic development in Kenya.

Nevertheless, the rapid growth of the savings and credit cooperatives sub-sector created the need for savings and credit cooperative specific legislation hence the enactment of the Sacco Societies Act (2008) to specifically regulate and supervise their operations. The enactment of the Sacco Societies Act (2008), made provisions for licensing, regulation, supervision, promotion of Sacco Societies and establishment the Sacco Societies Regulatory Authority (SASRA). This agency situation brings to light the need for a strong regulatory environment to safeguard member's deposits and investments (SASRA, 2008).

This is the main agenda for this research in Kenya where under the act, SACCOs are required to fully comply capital requirements, liquidity requirements, monitor member borrowings, engage in businesses as prescribed by the authority and conform to financial reporting as per the society (SASRA, 2008). The Act and the regulations cover capital, liquidity, the extent of external borrowing, asset categorization and provisioning, maximum loan size, and insider lending (SASRA, 2008).

1.1.1 Savings and Credit Cooperatives

Formal cooperatives in Kenya started taking shape much later when European settlers formed the Lumbwa Cooperative Society in 1908. For about two decades, the society was restricted to the settler population. Africans were only allowed to establish cooperatives after 1930s. The first piece of legislation on cooperatives was the Cooperative Societies Ordinance enacted in 1931. On February 8, 1931, the Kenya

Cooperative Creameries (KCC) was the first cooperative to be registered, followed shortly in the same year by the Kenya Farmers Association The Kenya Planters Cooperative Union (KPCU) was registered in 1937 and the Horticultural Cooperative Union (HCU) in 1951. Before this date, however, not only did some authentic co-operatives really exist, some of which are still in existence, but the essential features of co-operative thought were already shaped (Lambert, 1963). According to the Government annual economic survey, as at December 2009 there were more than 2,400 active SACCOs with membership in excess of 1.5 million people in Kenya. Share capital stood at Kshs. 65 billion while outstanding loans were Kshs. 59 billion.

The Sacco Societies act of Kenya (2008) terms SACCOs as "Sacco business" and defines it as a financial intermediation and any other activity by a Sacco society based on co-operative principles and in accordance with the act. This is by way of; either receipt of withdraw able deposits, domestic money transfer services, loans, advances and credit facilities; or receipt of non-withdrawable deposits from members and which deposits are not available for withdrawal for the duration of the membership of a member in a Sacco society and may be used as collateral against borrowings and domestic money transfer services. The government through the Ministry regulates the cooperative movement using the Co-operative Societies Act. The rules were enacted in 1966 and later revised in 2004.

1.1.2 Deposit taking SACCOs

According to the Sacco societies act of 2008 a deposit-taking Sacco is defined as business in which the person conducting the business holds himself out as accepting deposits on a day-to-day basis. They can also be described as any other activity of the Sacco business which is financed, wholly or to a material extent, by lending or

extending credit for the account and at the risk of the person accepting the deposit, including the provision of short-term loans to members.

According to Mudibo (2005), Deposit taking Savings and Credit Co-operatives (SACCOs) have impact on the Kenyan economy in a great way. They contribute 45% of the gross domestic product (GDP) in Kenya (Mudibo, 2005). This is despite the fact that they were not previously incorporated in the formal financial system. This led the government through Sacco Societies Regulatory Authority (SASRA) to make a decision to single out the potential that lies in strong SACCOs. It came with targeted legislation which would usher in regulations and benchmarks in line with the new Sacco environment commonly referred to as SACCOs Societies Act, 2008 (SASRA, 2012). This provided the groundwork for entrenching Sacco Societies Regulatory Authority. Societies Regulatory Authority ushered in prudential regulations to promote and maintain financial soundness of SACCOs (SASRA, 2012).

1.1.3 Financial Performance

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

Financial performance is the results of any of many different activities undertaken by an organization. Common examples of financial performance include operating income, earnings before interest and taxes, and net asset value (Cole, 2004). There are

different ways of measuring financial performance which should all be taken in aggregation. Line items such as revenue from operations, operating income or cash flow from operations can be used as well as total unit sales. The analyst may wish to look deeper into the financial statements to seek out marginal growth rate or declining debt using such ratios as Return on Assets (ROA), Return on Investment (ROI) and Return on Equity (ROE) (Johnson & Scholes, 2007). For this study, the researcher measures financial performance in terms of ROE.

In 1979, the Uniform Financial Institutions Rating System (UFIRS) was implemented in United States of America (U.S.A) banking institutions, and later globally, following a recommendation by the U.S.A Federal Reserve. The system became internationally known, reflecting five assessment areas: capital, asset quality, management, earnings and liquidity. This model is adopted for this study. In 1995 the Federal Reserve added financial System. This covers an assessment of exposure to market risk. The rating system is designed to take into account and reflect all significant financial and operational factors examiners assess in their evaluation of an institutions performance. Institutions are rated using a combination of specific financial ratios and examiner qualitative judgments (Brockett et al. 1997). They are discussed in the next section.

1.1.4 Prudential Regulatory framework

The savings and credit societies are among the very few business organizations which survived the financial meltdown of 2008 in developed and developing countries. This was in spite of the sector being not keenly regulated because of the people centered business model that the SACCOs embraced (WOCCU, 2006). The Act created SASRA whose mandate entails licensing, regulating and supervising Sacco societies

engaged in deposit taking business (KUSCCO, (2003). According to World Council of Credit Unions (WOCCU, 2006) prudential regulation is an approach to financial regulation whose main aim is to mitigate the risk in financial systems. Under the prudential regulatory framework, capital adequacy demands that SACCOs must meet the following criteria; core capital be not less than ten million shillings; core capital be not less than ten percent of total assets; Institutional capital be not less than eight percent of total assets; and core capital be not less than eight percent of total deposits.

The minimum liquidity regulations include monitoring liquidity, establish a cash holding limit, and frequently analyze asset and liquidity position. The regulatory requirements require DTSs to maintain liquidity level of 15 percent of their savings, deposits, and other short term liabilities in liquid assets. The risk classification of assets and provisioning require loans and credit advances not to constitute over 75.8 percent of total assets in DTSs. This was before the act. The act requires that loan granting and lending conforms to the approved credit policy. According to the report, loans and credit advances issued after the act increased by 15.8 percent reinforcing the role played by DTSs in provision of credit to their membership. The investments requirements meant that a Sacco society shall not invest in non-earning assets or property and equipment's in excess of 10% of total assets; of which land and buildings shall not exceed 5% unless a waiver to that effect has been obtained from the Authority. This was provided as long as donated assets and foreclosed assets are excluded in arriving at this percentage (SASRA, 2008).

1.2 Problem statement

The establishment of Sacco Societies Regulatory Authority was a brainchild of the enactment of the SACCO Act of 2008. It introduced regulations on both DTS and Non-DTS. SASRA's primary duty is to license and supervise deposit taking SACCOs in Kenya to deal with inherent business risks bedeviling SACCOs including credit, market, operational and legal (SASRA, 2012).

Major changes brought by the Authority at operational level are regulations that require SACCOs to reshuffle their boards, reengineer their corporate governance practices while upgrading staff capacity thereby improving profitability. SASRA impact especially on compliance among deposit taking SACCOs has been minimal. Various studies have been done on the impact of prudential regulatory framework on financial performance of SACCOs in Kenya. This includes Kioko (2010) who looked at capital requirements and management efficiency and found that higher capital requirements and increase in management efficiency impacted positively to SACCOs profitability in the post-capital regulation period.

There is also Odera (2012) who looked at governance theories and conflicts of governance associated with SACCOs with the advent of SASRA and found that governance had significant positive effect on performance. There is thus no study that has specifically targeted the prudential regulatory framework. Prudential regulation aims to reduce the risk that depository institutions fail (Cull, et al 2009). This led to the study on the impact of prudential regulatory framework on financial performance of deposit taking SACCOs in Kenya.

1.3 Research objectives

1.3.1 General objective

The general objective of this study is to examine the impact of prudential regulatory framework on financial performance of Deposit Taking SACCOs in Kenya.

1.3.2 Specific objectives

The following specific objectives guided the study:

i. To ascertain the relationship between minimum liquidity requirements and financial performance of Deposit Taking SACCOs in Kenya
ii. To assess the effect of minimum capital requirements on financial performance of Deposit Taking SACCOs in Kenya
iii. To ascertain the impact of loan provisioning requirements on Financial performance of Deposit Taking SACCOs in Kenya
iv. To assess the link between minimum investment requirement and performance of Deposit Taking SACCOs in Kenya

1.4 Research questions

The study was guided by the following research questions;

i. What is the relationship between minimum liquidity requirements and financial performance of Deposit Taking SACCOs in Kenya?
ii. What is the effect of minimum capital requirements on financial performance of Deposit Taking SACCOs in Kenya?
iii. What is the impact of loan provisioning requirements on financial performance of Deposit Taking SACCOs in Kenya?
iv. What is the link between minimum investment requirement and performance of Deposit Taking SACCOs in Kenya?

1.5 Scope of the Study

The study was limited to the deposit taking SACCOs in Kenya based on the researcher's desire to establish the impact of prudential regulatory framework on

financial performance of deposit taking SACCOs. This type of study has been chosen due to the characteristics associated with the subject population where the researcher has working knowledge and experience. It is easy to access the population and discovery of association among different variables is possible. Deposit taking SACCOs plays a vital role of providing access to banking services for majority of Kenyans on far flung areas where conventional banking has not taken root. The study thus limited itself to deposit taking SACCOs and study the impact of implementation of prudential regulatory framework on financial performance.

1.6 Significance of the Study

The purpose of this study is to investigate the impact of prudential regulatory framework on financial performance of deposit taking SACCOs in Kenya. This may contribute to the theory on prudential regulatory framework in financial management in Kenya. The study may contribute to the practice of financial management and in particular demonstrate the challenges of implementing prudential regulatory framework in the financial system.

This study could be of importance to members of Deposit Taking SACCOs in the Country in enabling them to understand the dynamics of implementing Sacco Societies Regulatory Authority regulations. Through the findings of the study, deposit taking SACCOs management can equip themselves with the relevant skills and knowledge necessary to ensure efficient implementation of the requirements. This would enable them to adopt the necessary change, to deal effectively with challenges arising from their constantly evolving Sacco’s environment and thus remain relevant and competitive in the financial management through enhanced and improved service

delivery. This is a great input in policy formulation and implementation right from government, stakeholders, and the customers of the deposit taking SACCOs in Kenya. Finally, the study may be useful to researchers and academia in the field of financial management in the devolved system of government where regions have to derive their own competitive strategies to grow their economies. It would be a source of reference in forming their future research topics and studies since knowledge is power.

1.7 Limitations and Delimitations of the study

According to Best ad Kahn (1998), limitations are conditions beyond the control of the researcher that may place restrictions on the conclusions of the study and their applications to other situations. This may include cases of exaggerated feedback in the data sought from the DTS bordering on mis-information; it may be difficult for the researcher to control the attitude of the respondents as they respond to the secondary data collection sheet. However, the respondents were assured of the confidentiality of the data provided. On the other hand, delimitations, which are boundaries of a study (Best & Kahn, 1998), were all DTSs in Kenya. Although there are other SACCOs in Kenya, only the DTS were studied as they are the ones affected by prudential regulations (SASRA, 2012).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature in line with the research problem to create insight and provide a better understanding of the research problem. The literature is reviewed under two categories, namely; the theoretical review and the empirical review. This review facilitates in the conceptualization of the research problem diagrammatically to provide a visual impression in a concise manner. The review further helps in identifying the research gap that the study aimed at bridging.

2.2 Theoretical review

There are several theories governing prudential regulatory framework on financial performance of deposit taking SACCOs. Three theories have been identified to guide this study: financial regulation theory, agency theory and stakeholder theory. These theories have been selected because of their argument on prudential regulatory framework on performance.

2.1.1 Liquidity and Regulation of Financial Intermediation Theory

The Theory of Liquidity and Regulation of Financial Intermediation was formulated by Farhi, Golosov and Tsyvinski (2009). The theory postulates two informational frictions: the first proposes that agents go through unobservable disturbances when they participate in markets by engaging in trades unobservable to intermediaries. In the absence of regulations, financial intermediaries have no risk mitigation mechanism because of an externality driven by arbitrage opportunities. In the wake of regulations, financial intermediaries offer risk sharing mechanism due to an

externality born of arbitrage opportunities.

The identification of a simple regulation by Farhi et al., (2009) led to formulation of a liquidity requirement that has the potential to correct an externality through interest rates in the markets. They further found that markets miss the extent of liquidity that is optimal. The liquidity cap that ought to be used is dependent upon the nature of the shocks that financial intermediaries' agent's experience. They went ahead to prove that the optimal liquidity requirements aid in the implementation of a constrained client allocation subject to unobservable elements. They proposed closed form solutions in arriving at the optimal liquidity requirement and welfare gains of imposing such requirements for two important special cases. In contrast with the existing literature, the necessity of regulation does not depend on exogenous incompleteness of markets for aggregate shock. It is difficult for an individual financial intermediary to preclude an agent to enter in additional risk sharing contracts with other intermediaries. Possibility of hidden trades can significantly worsen and even eliminate risk sharing.

Allen and Gale (2004) then conclude that, in the absence of aggregate shocks and incompleteness of the markets for aggregate risk, there is no regulation that can improve upon the market equilibrium. In contrast to the literature, Farhi et al, (2009) proposed that imposing a liquidity requirement on the minimal (liquidity cap) or the maximal (liquidity cap) amount of liquidity holdings of the short asset for an intermediary. They identify a reason for the market failure and externality in which intermediaries do not internalize how liquidity they provide aspects other intermediaries via the possibility of trades on private markets.

Importantly, this externality exists even when there are no aggregate shocks. This contrasts with the conclusions of Holmstrom and Tirole (1998) and Allen and Gale (2004) that the government has a role in regulating liquidity only if there are aggregate shocks. They also provide a closed form solution for the optimal regulation in two cases: for a setup with logarithmic utility and for the environment studied by Diamond and Dybvig (1983). Their model suggests practical implications for regulation of financial intermediation. Various types of intermediaries or different regions in a country, depending on the primary nature of the shocks that the agents whom they serve experience, should have different forms of liquidity regulations.

The above theory instigated the first specific objective of the study on the effects of liquidity requirements on financial performance of deposit taking Sacco's in Kenya.

2.1.2 Public Interest Theory

Public interest theory lies with Pigouvian welfare economics, which portrayed the state as an omnipotent, yet benevolent, maximizer of social welfare that could efficiently correct market failures (Pigou, 1932). It was first developed by Arthur Cecil Pigou who holds that regulation is supplied in response to the demand of the public for the correction of inefficient or inequitable market practices. Regulation is assumed initially to benefit whole society rather than particular vested interests. The regulatory body is considered to represent the interest of the society in which it operates rather than the private interests of the investors. The origins of this approach may be found in the writings of Bentley (1870–1957). Bentley argued that groups capture control of regulatory agencies to advance their interests. He dismissed the idea of public interest as a fiction that represented only the interests of group (Hantke-Domas, 2003).

Public interest approach is a conventional view of regulation rooted on welfare economics of Pigou's (1932). Samuelson (1947) responded to the deficiencies and unfitted market by focusing on interest of consumers' regulations in response to demand of relief from inequitable and inefficient market. The main focus of Public interest approach is public good from which group or some citizen will benefit. Under public interest approach bank regulation exist for exclusive benefit of depositors and investors. Public interest theory is usually contrasted with public choice theory that is more cynical about government behavior and motives and sees regulation as being socially inefficient.

Moreover, Stiger (1972) argued that regulation can be captured by incumbent firms to protect market from entry to competitors. Critics believe that this will only occur when the public demands a better allocative efficiency. This "theory" has no verified predictions or outcomes; therefore it is not viewed as a valid theory, Criticism does not mean that Public interest theory should be abandoned because it does explain well about bank regulation. Pigou's, (1932) classic treatment of regulation argues where market is imperfect, Adam smith invisible hand will not work. In addition He further argued that monopoly power, externalities, and informational asymmetries create a constructive role for finance and growth, and the strong helping hand of government to help offset market failures and thus enhance social welfare.

The growth of regulation in 1930's was simply a functional response to the changing public needs and interests of an evolving industrial society. Despite its romantic appeal, the public interest theory has been theoretically and practically discredited for its inability to take into account competing conceptions of the public good, its

ascription of heroic and unrealistic attributes to regulators, its underestimation of the power of organized interests, and its failure to explain why regulation often fails to deliver public interest outcomes (Baldwin & Cave, 1999). The public interest theory of regulation also holds that firms require regulations in order to guarantee the choice theory of regulation, which rests on the premise that all individuals, including public servants, are driven by self-interest (Hantke-Domas, 2003). The above theory instigated the capital and loan provision objectives of the study on the impact of prudential regulatory framework on financial performance of deposit taking SACCOs in Kenya

2.2.3 Agency Theory

The agency theory was developed by Jensen and Meckling (1976) in an effort to address the limitations that face relationships between principals and agents. Shareholders hire managers to manage their finances by making them productive. There is bound to be a challenge where the managers feel their efforts are not well rewarded whereas the shareholders might feel that the managers are employees whose reward should only be income for services rendered (Bamberg & Spremann, 1987). This is what Allen and Gale (2004) concluded when they found that the absence of aggregate shocks and incompleteness of the markets for aggregate risk, may be consequences of lack of regulation that could improve upon the financial intermediary market equilibrium.

The agency theory identifies to the challenges that arise from the principal-agent relationship. Two major situations however arise from this relationship thus forming the basis of this theory. First there is the problem that arises where the objectives or

desires of the principal conflicts with those of the agent (Bamberg & Spremann, 1987). In this regard, it becomes a major challenge for the principal to verify or ascertain the activities of the agent. This is a classical scenario in the wake of implementation of regulatory framework. The limitation may be exploited by the agent, in this case the regulator, for his own advantage thus limiting the benefits accruing to the principal, in this the deposit taking Sacco's. This may happen while at the same making it difficult for the principal to ascertain his activities. The principal might thus require of the agent to undertake risky activities such as adhere to liquidity requirements, capital requirements, loan provisioning requirements and investment requirements oblivious of the imminent risk in terms of making loses (Wanyoike, 2013).

The theory instigated the general objective of the study and the specific objective of investments requirements in the study on the impact of prudential regulatory framework on financial performance of deposit taking SACCOs in Kenya.

2.3 Empirical Review

The empirical review of literature presents a discussion of studies in line with the study objectives. Pyrczak and Bruce (2011) notes that empirical review helps in creating insight on the available literature on the study area. This is usually crucial since it provides a better understanding of the subject matter while at the same time helping in avoiding a study that would result in duplication of the available material. This section thus presents a discussion of studies in line with the study objectives to facilitate in the identification of the research gap that the study aimed at bridging.

2.3.1 Liquidity Requirements and Financial Performance

Ruozi and Ferrari (2013) noted the essence of imposing liquidity requirements towards the implementation of government policies. They found that liquidity requirements can be varied to regulate the quantity of money circulating in the economy and eventually impact financial performance of the organization. Covas and Driscoll (2014) avers that by regulating the quantity of money in the economy the level of demand is by extension regulated. However, it was noted that by regulating the liquidity requirements, the financial intermediaries are affected in terms of deposits that can be converted into loans. For instance, a high rate of liquidity requirements implies that the financial institutions have to retain a higher level of deposits thus reducing the amount of deposits that can be converted into loans. Varying the levels of liquidity requirements affects the performance of financial intermediaries substantially. Financial intermediaries get their incomes from interests of loaned out funds, regulations that affect loanable funds affects the income of the financial intermediaries.

Various regulations are imposed by the financial regulatory framework aimed at safeguarding the financial sector in the economy. In most economies, the central bank is usually given the mandate of regulating financial institutions by developing regulations and policies and ensuring that the financial intermediaries and players in these markets comply with these regulations. Minimum liquidity requirements are a regulation imposed on financial intermediaries by the regulatory authority, which is the central bank, for various reasons (Kiragu, 2014). He found that liquidity requirement is a regulation that requires the financial intermediaries to retain a predetermined proportion of deposits in the vaults at any given time. He further

argued that these deposits are aimed at ensuring that the financial institutions remain liquid enough to be able to meet withdrawals from customers. Ruozi and Ferrari (2013) note the psychological expectations of customers that they can easily access their deposits at any given time from their accounts with the financial intermediaries.

2.3.2 Capital Requirements and Financial Performance

The basic desire of a bank's management is to make profit, as the essential requirement for conducting any business (Davis & Zhu, 2010). Bouvatier, V and L Lepetit (2008) carried out a study on the relationship between the return on equity and the capital asset ratio for a number of banks in the United States for the period from 1983 to1992 and his study showed that return on equity and capital asset ratio tend to be positively related. Gale (2010) also carried out an investigation on the determinants of bank interest margin and profitability for some countries in Europe. The results of their study indicated that adequately capitalized banks had lower funding costs and probability of bankruptcy which then translated into them having higher profit levels and better financial performance in the industry. A higher equity-to-asset ratio results in a lower need for external funding which in turn increases bank profits. This necessitated a review of the effects of prudential regulatory framework and its impact on financial performance.

Insufficient capital requirements might result in investors and depositors being cautionary by refraining from dealing with the banks which will therefore have an adverse effect on the overall profitability of the bank .Most researches by various scholars point to the notion that an increase in bank capital results in an increase in banks overall returns. This positive correlation between capital and profitability has

also been concurred to by Gale (2010) and Kerwer (2005) who all assert that increase in minimum capital requirements reduce the risk of bank distress which will then result in increased profitability. A study carried out in India indicated that banks with higher capital requirements have the ability to absorb unexpected losses easily and have reduced cost of capital which means their profit levels are usually high. Evidence from studies carried out on United States Banks state that apart from regulatory pressures, a bank's capital level may depend on their business plan which is a major contributor to financial performance outcomes. A bank that intends to take over another bank might be adequately capitalized to impress regulator without necessarily being profitable.

2.3.3 Loan Provisioning Requirements and Performance

Loan provisioning requirement (LPR) research used to focus narrowly on accounting perspective on whether provisions were used by banks to smooth earnings and impact financial performance (Greenawalt and Sinkey (1988). More recently, research work has focused on how provisions contribute to the procyclicality of financial systems by being lower when output and credit are expanding and higher in periods of contraction. In early work from this perspective, Borio et al (2001) documented a strong negative correlation of bank provisions with the business cycle for ten members of the OECD and its impact on financial performance. Subsequent empirical studies have used bank-level information to investigate the procyclicality of loan loss provisions in more detail and establish its implications on financial results (Cavallo and Majnoni (2002), Laeven and Majnoni (2003) and Davis and Zhu (2009).

Another proxy for bank-specific loan portfolio credit quality is loan growth, which at higher levels may reflect higher levels of risk being taken on. However, in most of the studies, provisioning expenses vary negatively with loan growth, consistent with provisions declining even as surges in new loans might indicate increased riskiness and in some cases improved financial performance. One exception is Bikker and Metzemakers (2005), who found a significantly positive impact of loan growth on provisions due to application of prudential regulations. The main regulatory changes which affected provisioning were changes in loan classification standards, which were particularly intense in the late 1990s and early 2000s, when Japan tightened its guidelines on loan classification, which had come under attack for its overly slow recognition of problem loans (Packer, 2000).

2.3.4 Investment Requirements and Financial Performance

SACCOs like all the other financial institutions are closely monitored and with strict guidelines that they should always adhere to. One such regulation is the requirement on investments. The Sacco Societies act Cap 490 establishes the savings and credit cooperatives society's regulatory authority which is mandated with overseeing the regulation of the Sacco societies. According to Porteous, Collins, and Abrams (2010) supervision of SACCOs is ensuring that customers savings are safeguarding especially when they are invested for income. Porteous, et al (2010) notes that there is need to maintain a high standing among all the financial intermediaries including SACCOs with regard to investment vehicles they can engage in. This has a great impact on financial performance of the organizations.

The Center for Financial Training (2010) argues that inefficiencies or frustrations by these entities can lead to a disincentive to save among the citizens thereby affecting the levels of investments adversely and impacting financial performance negatively. According to Wanyoike (2013) deposit taking SACCOs in Kenya are regulated by Sacco Societies Regulatory Authority which has been in operation since 2010. He however notes that the impact of this supervision and regulation has not been clearly determined especially with regard to investnent requirements and what portofolio of invetsments a deposot taling Sacco can make in different financial instruments. This is attributed to the minimal focus in research that has been pointed towards analysing the implication of the regulations on the performance of the deposit taking Saccops in the country, rather than an indepth look at the investment portfolio and its relation to prudential regulations.

The essence of minimum investments among financial internmediaroes is clear in the Banking Act of Kenya which requires that all banks in operating in kenya must publish their financial reports clerly indicating their investment of members funds. This thus makes it possible for the citizens in the country to make informed decisions while making savings by judging from the performance of their bankers. Wanyoike (2013) notes the essence of making financial reports diclosing investments done being made available to the public domain especially for the financial sector whose dynamics are sensitive to the performance of the economy is key for financial performance of the depoait taking SACCOs. According to Wanyoike (2013) the regulation on minimum investments promotes transparency and accountability in the banking sector including deposit taking SACCOs since it is iminent that the performance of these institutions is of great concern to not only insiders but also the

investing public domain. A Sacco society shall not invest in non-earning assets or property and Equipments in excess of 10% of total assets; of which land and buildings shall not exceed 5% unless a waiver to that effect has been obtained from the Authority. Provided donated assets and foreclosed assets are excluded in arriving at this percentage.

2.4 Research gap

The context by Covas and Driscoll (2014) as postulated by their argument is that by regulating the quantity of money in the economy the level of demand is by extension regulated. However, it was noted that by regulating the liquidity requirement the financial intermediaries are affected in terms of deposits that can be converted into loans. This forms a contextual difference with Gale (2010), whose studies in Europe found that adequately capitalized financial institutions such as banks had lower funding costs and probability of bankruptcy which then translated into them having higher profit levels. Similarly, the concept on loan provisioning requirement research by Greenawalt and Sinkey (1988) focused narrowly on accounting perspective on whether provisions were used by financial institutions to smooth earnings.

It was Porteous, Collins, and Abrams (2010) who found that supervision of SACCOs ensured that customer's savings are safeguarding especially when they are invested for income thus implying a deviation in concept from these two findings. A descriptive survey methodology by Wanyoike (2013) for instance found regulation crucial in promoting transparency in these financial institutions while Borio et al (2001) in correlational study documented a strong negative correlation between regulations, that is, bank provisions with the business cycle for 10 The Organization

of Economic Development (OECD) countries. These presented a strong case for regulation of financial institutions.

From the foregoing literature it is evident that significant effort has been placed on the financial sector majorly focusing on the dynamics of the various financial intermediaries. Imminently though, there seems to be an extensive debate with findings by different scholars at times contrasting and deviating with regard to the impact of prudential regulatory framework on performance of the financial institutions. These include deposit taking SACCOs. The review further indicates some level of alignment of the regulations available for the various financial intermediaries though there are various deviations based on the location of the study. This determination was be crucial in evaluating the merits and demerits of the prevailing framework in Kenya and the limits beyond which the prudential regulatory framework becomes detrimental to the performance of Deposit Taking SACCOs in Kenya. This is the gap that the study seeks to bridge through research.

2.5 Conceptual framework

Ravitch & Riggan (2012) describes a conceptual framework as tool used in analyzing variations and contexts by making logical distinctions and organizing ideas in way that is easy to understand. This framework illustrates the relationship between the independent variables and the dependent variable. It shows the relationship between prudential regulatory framework and financial performance of deposit taking SACCOs in Kenya. The performance is measured in terms of profitability, assets growth, and client growth.

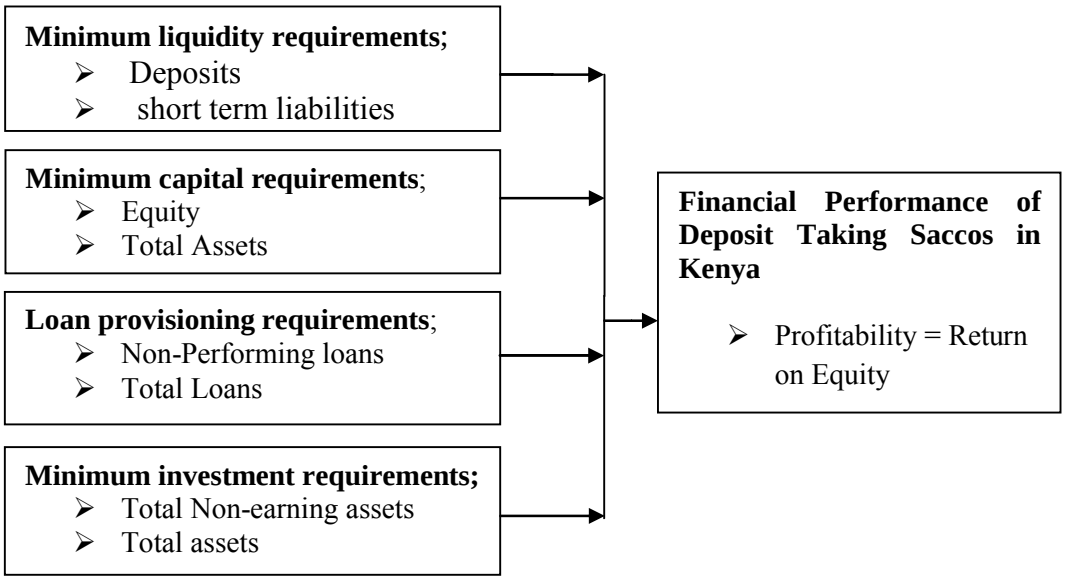


Figure 2. 1 Conceptual framework
Source: Author (2016)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This Chapter outlines the manner in which the study was conducted. The key components are the research design, location of the study, target population, sampling technique, research instrument, data collection and data analysis and presentation.

3.2 Research Design

This study used a descriptive survey research design. Kothari (2004) recommends descriptive survey design for its ability to produce statistical information about aspects of education that interest policy makers and researchers. The design has been chosen for this study due to its ability to ensure minimization of bias and maximization of reliability of evidence collected. Furthermore, descriptive survey design raises concern for the economical completion of the research study.

3.3 Scope of the Study

The scope of the study is the DTS in Kenya. The selection was thus prompted by the researcher's professional interest to conduct research in the area based on familiarity and accessibility of the deposit taking SACCOs. The area was selected as it allows for immediate rapport with the respondents (Mugenda & Mugenda 2007).

3.4 Target Population

Target population in statistics is the specific population about which information is desired. According to Cooper and Schindler (2003) a population is a well-defined set of people, services, elements, and events, group of things or households that are being investigated. The target population was all 181 deposit taking Sacco's in Kenya, as per SASRA (2013). This implies that the study was a census and no sampling was be

carried out. The target respondents were heads of finance from each of the deposit taking SACCOs in Kenya.

3.5 Research instrument

The study used secondary data that was obtained from the heads of finance in the deposit taking SACCOs through a data collection sheet. The data was for the years 2010-2014. Other information was found in recent annual published financial statements and SASRA records accessible online and in survey manuals. As Cooper and Schindler (2008) explained, secondary data is a useful qualitative technique for evaluating historical or contemporary confidential public records, reports, government documents, and opinions. Secondary data analysis is efficient and economical (Ngumi, 2013).

3.6 Data Collection

This secondary data was collected through a data collection sheet. The researcher wrote to the 181 deposit taking Sacco's in Kenya via email requesting for the relevant data and information as envisaged by the study. Upon receipt of all available and reliable publications, the researcher embarked on data analysis as guided by the research objectives.

The data to be collected for each variable includes; for financial performance, the data to be collected was net surplus and total equity ; for liquidity requirements, the data to be collected was savings, deposits and other short term liabilities; for capital requirements, the data to be collected was equity and total assets; for loan provisioning, the data to be collected was total loans as well as non-performing loans;

while for investment requirements, the data to be collected was total Assets and total investments in non-earning assets including land and buildings.

3.7 Data Analysis and Presentation

All the collected data was cleaned, coded, and entered in to computer for fast and accurate analysis. Ratio analysis was employed to calculate the liquidity, capital, loans and investments and performance among the deposit taking SACCOs by running the data through excel. The data was then analyzed using normal regression analysis and random effects panel data analysis. A panel data set is one that follows a given sample of individuals over time and thus provides multiple observations of each individual in the sample. One of the main advantages of Panel data is that it enables the researcher to control unobserved heterogeneity and secondly since panel data has both cross-sectional and time series dimensions, it provides the researcher with sufficient data points to reduce the likelihood of biasness in the parameter estimators.

The data obtained was analyzed by use of descriptive statistics and inferential statistics (correlation analysis and panel multiple regression analysis). The panel methodology was aided by SPSS V 20.0 software. After extracting data from the financial statements, an Excel program was used to compute the relevant ratios for each of the SACCOs across time. Descriptive statistics were used to summarize and profile the status of liquidity, capital, loans, investments, and financial performance among deposit taking SACCOs in Kenya.

Multiple linear regression models were applied to the data on the impact of prudential regulatory framework on financial performance of deposit taking Sacco's in Kenya. This is a set of techniques for generating predicted scores for one variable, in this case

the dependent variable, from four predictor variables, in this case independent variables. The study adopted a model similar to that used by previous researchers in the area of CBK regulatory requirement and financial performance (Ngumi, 2013; Ogilo, 2012; Ngigi, 2012). The regression model was developed as follows;

$Y= \beta_0+\beta_1X_1+ \beta_2X_2+ \beta_3X_3+ \beta_4X_4+ \alpha$ where

β_1, β_2, and β_3 is the regression coefficient of the independent variables

Where Y= financial performance

X_1= Liquidity requirements

X_2= Capital requirements

X_3= Loan provisioning requirements

X_4= Investment requirements

α = Stochastic error term whose value was take as 0

3.7.1 Operationalization of Variables

Constructs of each item of the variable were measured by scale as summarized in table

Table 3. 1 Measurement of variables

	Variables	Measures	Notation
Dependent Variables	**Financial Performance**	Return on Equity=Net Income divided by Total Equity	**ROE**
Independent Variables	**Liquidity Requirements**	Savings, deposits and other short term liabilities to liquid assets	**LR**
	Capital Requirements	Capital Adequacy =Equity/Total Asset	**CR**
	Loan Provisioning Requirements	Asset Quality=Non-performing Loans to Total loans	**LPR**
	Investment Requirements	Total Investments to Total Investment in Non-earning Assets	**IR**

Source: Author (2016)

The findings of the data analysis presented in tables and narratives comprise of means, standard deviations, and variances. Inferences were made from particular data under each theme and conclusion was then drawn from the findings (Cooper and

Schindler, 2003). Test of significance was done and the coefficient of determination (R^2) was used to check if prudential regulatory framework has had an effect on Sacco's financial performance. On the correlation of the study variables, the researcher conducted a Pearson Product Moment correlation.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter entails an analysis and presentation of the findings of the study. The findings are based on the responses from the data collection worksheets. From the 181 data collection worksheets distributed to the Deposit Taking SACCOs, 116 were returned and used in the study, a 64% response rate. The findings are presented in this chapter staring with sample characteristics, followed by results based on the study objectives.

4.2 Pilot study results

A pilot study was steered to pretest the instrument used in data collection. The data collection instrument was distributed to 19 SACCOs out of whom 17 responded amounting to a response rate of 89.5%. The Cronbach's Alpha was used in the study for internal consistency. The rule of the thumb for Cronbach Alpha is that the closer the alpha is to 1 the greater the reliability (Sekaran, 2010) and a value of at least 0.7 is recommended. The findings in this case are presented in the table below.

Table 4. 1 Summary of Cronbach's Alpha Reliability Coefficient

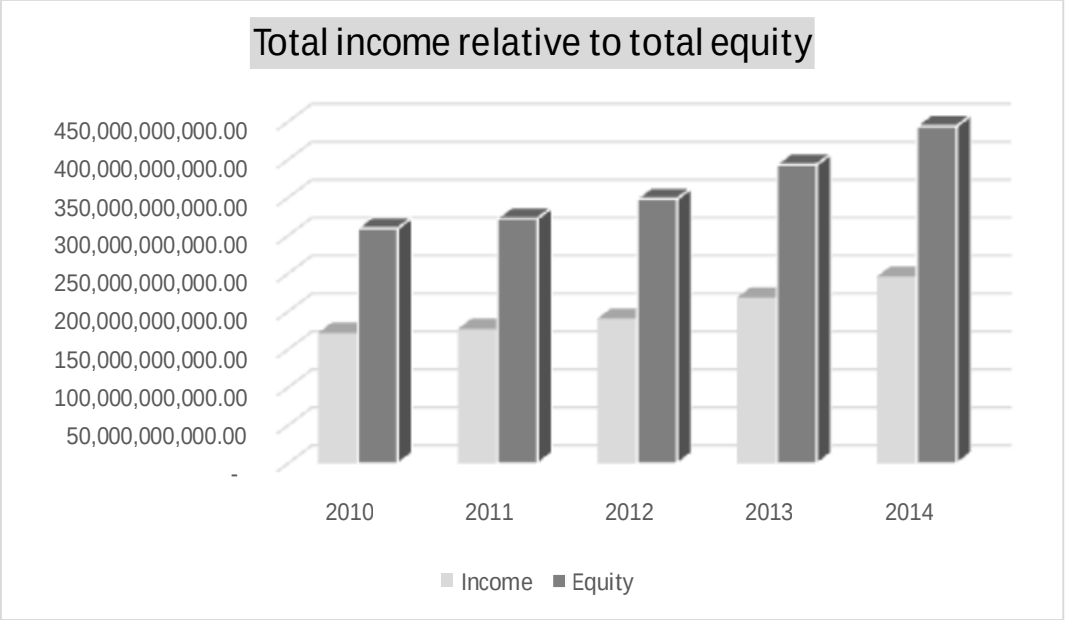
Reliability Statistics	Number of items	Cronbach's Alpha
Capital Requirement (CR)	12	0.930
Liquidity requirement(LR)	10	0.823
Loan provisioning requirement (LPR)	10	0.873
Investment requirement (IR)	9	0.891

The findings show that all the measures had Cronbach's Alpha values greater than 0.7 which fall in the acceptable limit. This indicated a strong internal consistency among measures of variable items.

4.2 Return on Equity

The return on equity variable was adopted as the dependent variable in the study thus representing the financial performance of SACCOs in Kenya. The study sought to determine the productivity of equity injected into running the SACCOs in Kenya. In this regard the study sought information on the net income of the SACCOs, and the total equity of these entities for a period of five years ending the year 2014. To create a clear impression of the implication of the aforesaid regulations on financial performance, this data was collected for a period of five years. This facilitated in showing the trend of this variable overtime. The information in this regard is presented in the figure below.

Figure 4. 1 Total income relative to total equity

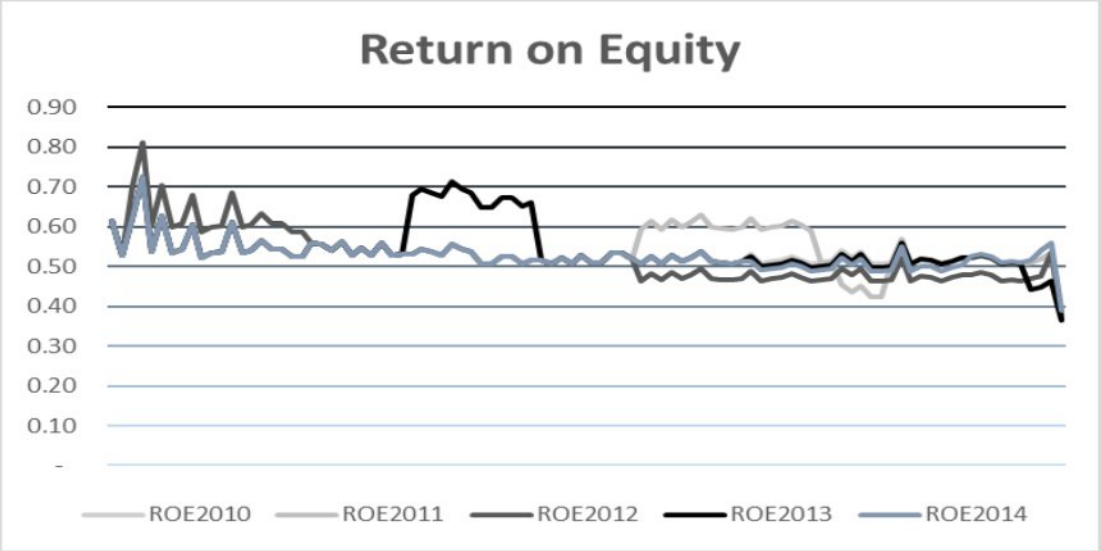


The findings show a general increase in both total equity and total income of the SACCOs overtime. Given that the data was plotted for all institutions in question, the

findings show a general tendency to increment in both income and equity among all the entities. This points to a given level of uniformity in management practices in the SACCOs and/or uniformity in administration of regulations that govern these entities. These findings contrast the views of Allen and Gale (2004) on the agency theory and financial regulation. According to Allen and Gale (2004) the absence of aggregate shocks and incompleteness of the markets for aggregate risk, may be a consequence of lack of regulation that could improve upon the financial intermediary market equilibrium.

Moreover, from the income and equity figures obtained for each SACCO that took part in the study, the return on investment for each SACCO was computed by establishing the quotient of the two variables. These figures were plotted for each of the years under question and the results presented as shown in the figure below.

Figure 4. 2 Return on equity



The findings show that the figures are distributed between 0.5 and 0.6 with a few outliers extending to a high of about 0.82 and a low of 0.37. Given the high accumulation of the ROE variables with the middle, the results show that ROE of SACCOs in Kenya follow a normal distribution. These findings relate to the views of

Pigou (1932) on his theory of public interest Public interest theory and its relationship to the performance of an entity. The Pigouvian view, under welfare economics, portrayed the state as an omnipotent, yet benevolent, maximizer of social welfare that could efficiently correct market failures (Pigou, 1932). The efficient correction of market failures through state regulation can thus be well portrayed by relatively normal distribution depicted in the findings of the figure above.

4.3 Prudential Regulatory Framework

In assessing prudential regulatory framework which covered the independent variables of the study the study focused on the aforesaid variables independently to try a link them to the dependent variable. This was done by running a regression analysis on the study model and assessing the results with the trend of the individual variables.

4.3.1 Regression Analysis

In order to determine the relationship that exists between the dependent variable (financial performance) and the independent variables, a multiple regression analysis was conducted. In this case the computer software; statistical package for social sciences (SPSS V 20.0), was used to code, enter, and calculate measurements of the multiple regressions.

The study first sought to establish the relationship that prevailed between the variables used in modelling the study. In this case the Pearson correlation coefficient was sought for all the variables relative to each other. Of interest to the study though was the relationship between the dependent variable and each of the independent variables individually. The findings in this were computed with the help of the SPSS V 20.0 software and the output is presented in the table below.

Table 4. 2 Correlations

Correlations

		ROE	LR	CR	LPR	IR
Pearson Correlation	ROE	1.000	.170	.182	.173	.163
	LR	.170	1.000	.745	.745	.745
	CR	.183	.745	1.000	1.000	.
	LPR	.183	.745	1.000	1.000	1.000
	IR	.183	.745	.	1.000	1.000
Sig. (1-tailed)	ROE	.	.048	.037	.037	.037
	LR	.048	.	.000	.000	.000
	CR	.037	.000	.	.000	.000
	LPR	.037	.000	.000	.	.000
	IR	.037	.000	.000	.000	.
N	ROE	96	96	96	96	96
	LR	96	96	96	96	96
	CR	96	96	96	96	96
	LPR	96	96	96	96	96
	IR	96	96	96	96	96

The findings in this case show that there is a positive relationship between the dependent variable and liquidity requirement, capital requirement, loan positioning requirement and investment requirement. In terms of magnitude, the relationship between the dependent variable, and loan positioning requirement is stronger compared to the relationship between the dependent variable, and investment requirement?

4.3.1.1 Model summary

The study sought a summary of the model variables. In this case, the study sought the mean, the standard deviation, and the number of elements used in the analysis. The summary of the model as generated is presented in the table below.

Table 4. 3 Descriptive Statistics

Descriptive Statistics

	Mean	Std. Deviation	N
ROE	.5278	.03773	96
LR	1.6115	.44040	96
CR	.7303	.05996	96
LPR	.2697	.05996	96
IR	.4397	.05996	96

The findings show that liquidity requirement had the highest deviation from the mean while the dependent variable had the least inconsistencies as depicted from the deviation from the mean of 0.037. These findings were based on the variables individually and thus the study further sought the summary of statistics for the model. The findings in this regard are shown in the table below.

Table 4. 4 Model summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.910[a]	.836	.765	.03743

a. Predictors: (Constant), IR, LR

The findings on *R* which is the multiple correlation coefficient that shows quality of the prediction of the dependent variable by the independent variable is 0.910. This is a relatively fair indication since it points to a strong correlation. The *R-Square* which is the coefficient of determination shows that the four independent variables in the model explain 83.6% of financial performance. Subsequently from the Adjusted R-Squared it is evident that after adjusting the model for inefficiencies the independent variables can explain 76.5% of financial performance.

4.3.1.2 The Analysis of Variance (ANOVA)

To determine whether the overall regression model was a good fit for the collected data, an ANOVA was done. The output in this case is presented in the table below.

Table 4. 5 Analysis of Variance

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.005	2	.002	11.74	.080[b]
	Residual	.130	93	.001		
	Total	.135	95			

a. Dependent Variable: ROE

b. Predictors: (Constant), IR, LR

The significance level in the model was 0.80 which is less than the 5% level of significance used in the model. It therefore follows that the model is statistically significant in predicting how the independent variables affect financial performance. On the other hand, F critical at 5% significance level is 3.17 while the F-calculated is 11.74. It therefore follows that the overall model is significant since the F-calculated is more than the F-critical.

4.3.1.3 Regression Coefficients

The regression equation can be explained by the following regression coefficients.

Table 4. 6 Regression Coefficients

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	.503	.0.60		-1.071	.333	-.454	.187
LR	.007	.013	.198	1.682	.053	-.025	.119
IR	.080	.096	.345	2.874	.035	.014	.251
CR	.036	.015	.288	1.768	.031	-.012	.063
LPR	.086	.035	.550	3.502	.017	.023	.150

a. Dependent Variable: ROE

To determine the relationship that exists between financial performance and the four independent variables, a multiple regression analysis was conducted. The results generated from the SPSS V 20.0 in this case are shown in the table above. In this case, the regression equation $Y= \beta_0+\beta_1X_1+ \beta_2X_2+ \beta_3X_3+ \beta_4X_4+ \alpha$ becomes;

$$Y= 0.503 + 0.007LR + 0.08IR + 0.036CR+ 0.086LPR$$

From the regression equation above it follows that holding all the independent variables constant, financial performance will increase by 0.503 units. The findings also show that holding all other independent variables constant other than liquidity requirement, a unit increase in financial performance as determined by return on equity will lead to a 0.007 increase in financial performance, a unit increase in investment requirement will lead to a 0.08 increase in financial performance holding

all other factors constant, a unit increase in capital requirement will lead to a 0.036 unit increase in financial performance holding all other factors constant, while a unit increase in loan provisioning requirement will lead to a 0.086 increase in financial performance holding other factors constant. This shows that holding other factors constant, effects of loan provisioning requirement contributes most to financial performance of Deposit Taking SACCOs in Kenya.

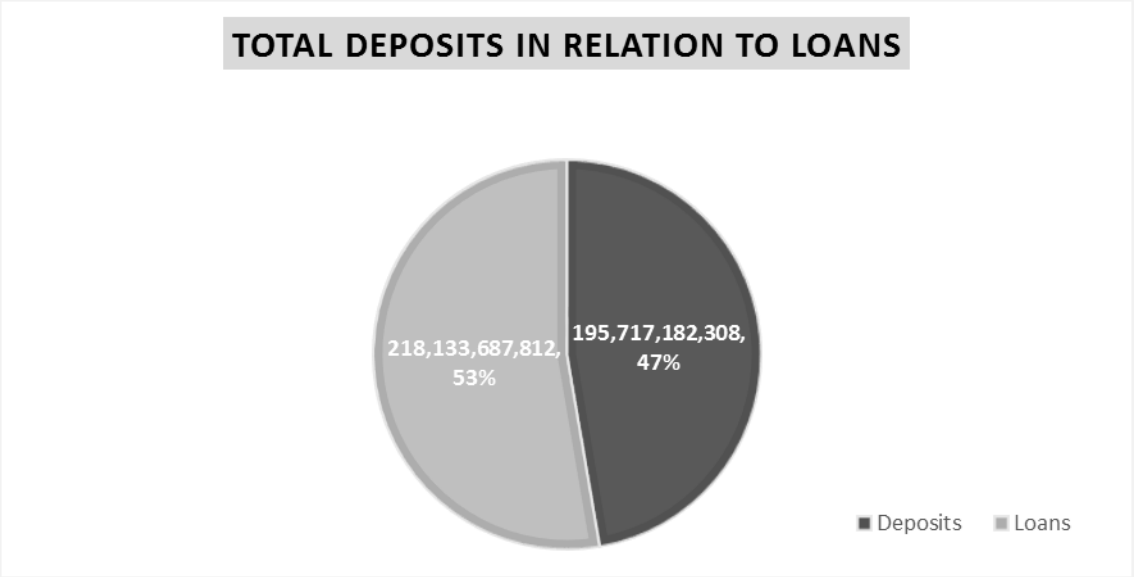
These findings were further assessed against the findings on the individual study variables from the data collected. This was done to assess the consistency of the model to the implication of the individual variables. The discussion in this regard is presented below.

4.3.2 Minimum liquidity requirements and financial performance

In analyzing the implication of minimum liquidity on financial performance, the study sought information on the prevailing data on liquidity of the institutions under study. In this regard, the study sought a panel data for savings, deposits, short term liabilities, and liquid assets that were available in the entities under study. This information would be crucial in determining the trend on these variables. Furthermore, this information would facilitate in computing the liquidity ratio which was a variable of interest in the model of the study.

The study focused on liquidity requirements by addressing elements that influence the liquidity of financial intermediaries. The study first focused on the relationship between deposits and loans among the entities under study. This is because the level of loans and deposits made could imply the implication of the entity in question. Moreover, this information would provide an impression of the proportions of each of these elements. The information in this regard is shown in the figure below.

Figure 4. 3 Total deposits in relation to loans

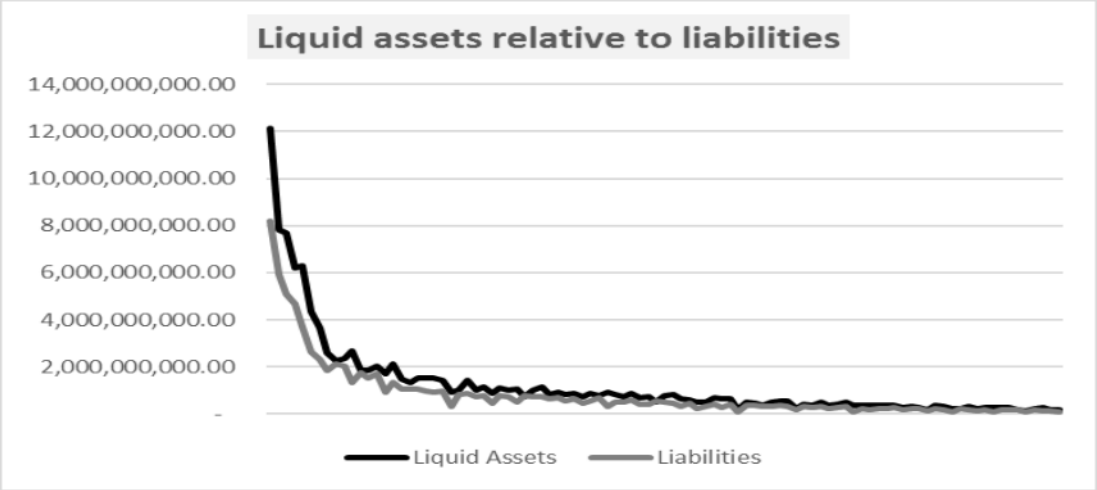


The findings show that loans issued by these institutions in total are higher compared to deposits made by the entities. These finding was constant for all entities under study htus implying a generla trend in this regard. It therefore follows that there is an evident regulation on these entities aimed at achieving a given level of loans relative to deposits among Deposit Taking SACCOs in the country thus achieving a given trend on quantity of money in the economy. These findings thus contradicts the findings by Covas and Driscoll (2014). According to Covas and Driscoll (2014) by regulating the quantity of money in the economy the level of money demand is by extension regulated. However, the findings in this respect point to a reverse on the above statement. This implies that the prudential regulations applied in this case affect quantity of money indirectly, that is, affecting the levels of deposits and loans, to in turn affect quantity of money in the economy and not the other way round.

The study further sought to establish the liquidity situation of the entities in terms of operating finances. This was done by focusing on liquid assets available to the institutions as well as the short term liabilities facing these entities. This information was crucial in determining how liquid the institutions under study are, and thus

facilitate a link between the findings and the implication attributable to prudential regulatory framework. In this regard liquid assets and liabilities facing the Deposit Taking SACCOs were plotted in the same Cartesian plane to facilitate ease in comparison. The findings are shown in the figure below.

Figure 4. 4 Liquid assets relative to liabilities



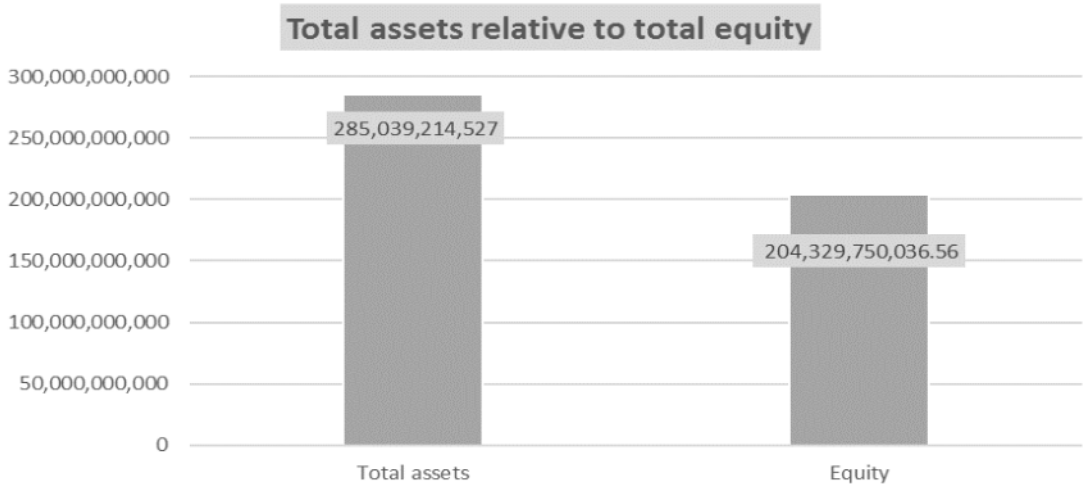
The findings point to a slight variation between the amounts of liquid assets relative to short-term liabilities as shown in the figure above. Liquid assets are relatively higher compared to short-term liabilities as shown in the figure above. The implication of prudential regulatory framework in this case point to ensuring that Deposit Taking SACCOs remain liquid at all times by ensuring that liquid assets remain relatively higher than short-term liabilities. These findings are similar to the findings by Kiragu (2014). According to Kiragu (2014) liquidity requirement is a regulation that requires the financial intermediaries to retain a predetermined proportion of deposits in the vaults at any given time. The argument by Kiragu (2014) is that these deposits are aimed at ensuring that the financial institutions remain liquid enough to be able to meet withdrawals from customers. These findings are also similar to the findings of a study by Ruozi and Ferrari (2013) which noted the psychological expectations of customers that they can easily access their deposits at any given time from their

accounts with the financial intermediaries. The indirect implication of liquidity requirement on financial performance could be used to explain the relatively minimal implication of this variable as seen on the regression model.

4.3.3 The effect of minimum capital requirements on financial performance

In determining the implication of minimum capital requirements on financial performance the study focused on the capital equity aspect on the capital structures on the entities under study. The equity was then assessed against the total assets held by these entities. This was aimed at determining the proportions of the total assets that were made up of equity.

Figure 4. 5 Total assets relative to total equity



The findings show that a significant proportion of the total assets charged to the Deposit Taking SACCOs under study was made up of equity. it therefore follows that the prudential regulatory framework imposed on Deposit Taking SACCOs requires a substantial proportion of the capital structure of these entities to be from equity contribution. This therefore explains the high income attributable to these entities as discussed earlier, given that these entities have substatial capital to finance their operations. These findings contrast with the findings by Bouvatier, and Lepetit (2008) that was carried on selected banks in the United States of America. According

to the study by Bouvatier, and Lepetit (2008) a relationship was established between the return on equity and the capital asset ratio for a number of banks in the United States for the period from 1983 to1992. The study showed that return on equity and capital asset ratio tend to be positively related. In this regard, the capital asset ratio was computed for all the entities under study and the resulting figures plotted. The findings in this case are presented in the figure below.

Figure 4. 6 Capital requirement

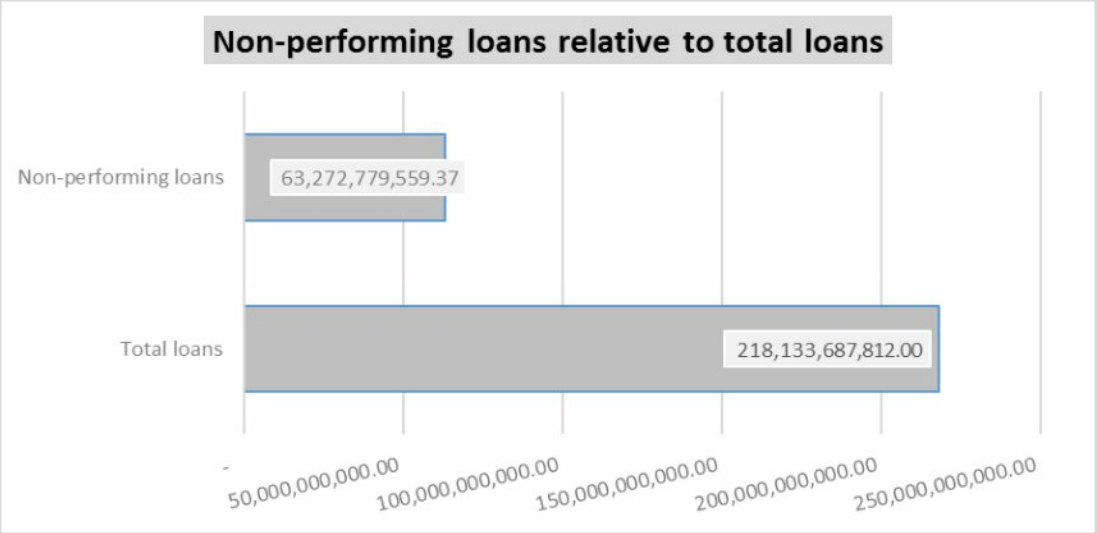
The capital requirement was computed as a quotient of equity relative to the assets charged to a respective Deposit Taking SACCO. The findings show that the capital requirement for all the entities under study are within 0.65 and 0.9 thus implying the possibility of prudential regulatory framework. This is explained by the fact that though the entities are independent of each other in terms of capital structure and policy formulation, there exists a significant degree of similarity in the capital requirement. These findings explain the significance of the capital requirement variable to the study as seen from the regression results.

4.3.4 The impact of loan provisioning requirements on financial performance

In assessing the impact of loan provisioning requirements on the financial performance of Deposit Taking SACCOs, the study focused on the implication of

non-performing loans relative to performing loans in assessing the overall implication on performance of these entities. In this regard the model variable, which is the loan provisioning requirement, was computed as a quotient of the non-performing loans relative to total loans issued by the Deposit Taking SACCOs in Kenya. To get a visual impression of the implication of non-performing loans, the total non-performing loans issued by all entities under study were plotted against the total loans issued. The findings in this regard are shown in the figure below.

Figure 4. 7 Non-performing loans relative to total loans

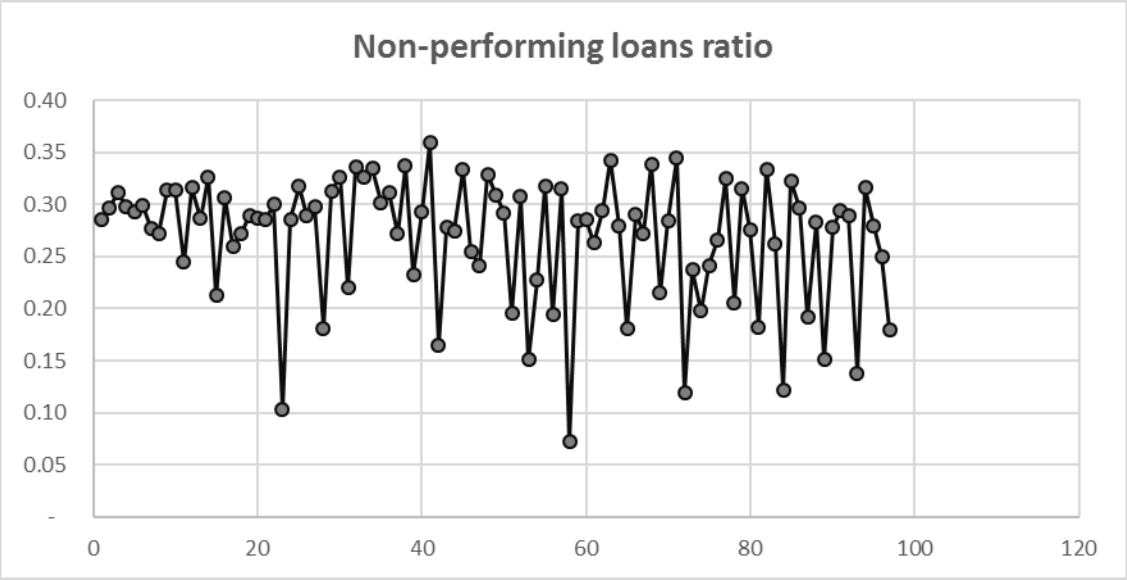


The findings show that about 28% of the total loans issued are non-performing loans hence facing the imminent risk of default. This shows that the prudential regulatory framework institute to regulate non-performing loans is relatively effective. However, given that the economic performance of Kenya has being improving significant over the period under study, the findings contradict the findings of the study by Borio, et al (2001). According to the perspective by Borio, et al (2001), he documented a strong negative correlation of bank provisions with the business cycle for ten members of the OECD and its impact on financial performance. On the contrary, the loan provisioning requirements place by the prevailing prudential regulatory framework is achieving a relatively low level of non-performing loans, holding all other factors

constant. The findings however, concur with the findings by Bikker and Metzemakers (2005). According to the study by Bikker and Metzemakers (2005), they found a significantly positive impact of loan growth on provisions due to application of prudential regulations.

The study further computed the loan positioning requirement (LPR) as a ratio of non-performing loans in relation to performing loans. This was done to determine the extent to which the non-performing loans were impacting on the financial performance of Deposit Taking SACCOs in Kenya. A high ratio for the non-performing loans would imply a dismal performance on the financial aspects of these institutions. The ratio were thus computed for all entities under study and the resulting figures plotted on a linear graph as shown below.

Figure 4. 8 Non-performing ratio



The findings show that a majority of the entities have their loan positioning requirement distributed between 0.2 and 0.35. The average LPR in this case was found to be 0.27. This implies that about 27% of the loans issued by Deposit Taking SACCOs in Kenya are non-performing. The above figure however shows that the

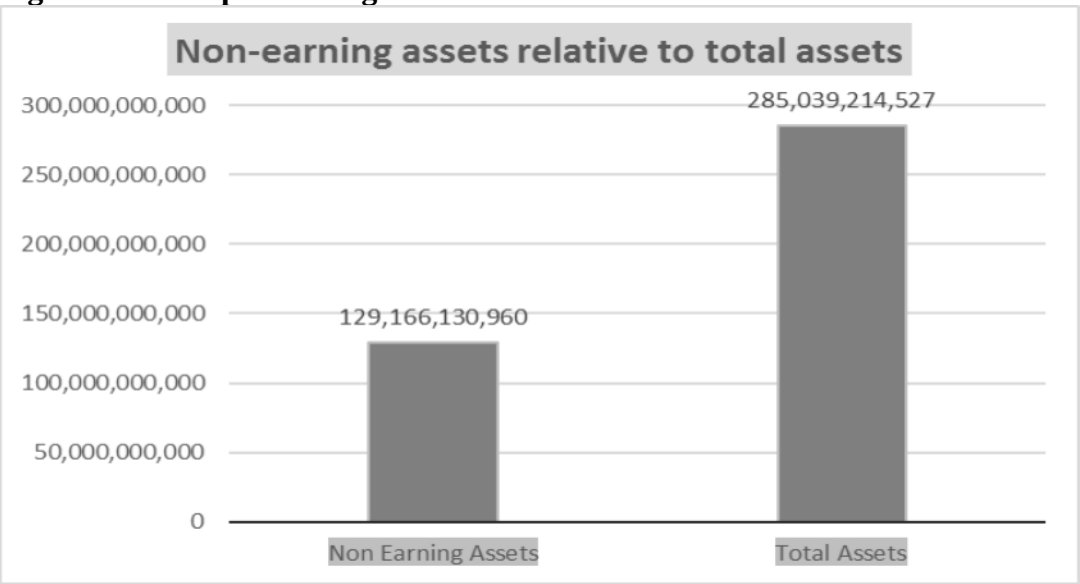
LPR figures for the entities used in the study are relatively close especially given the low standard deviation 0.6 that was computed from the LPR figures. This similarity in relative terms supports the high level of significance of this variable from the regression results.

4.3.5 The link between minimum investment requirement and financial performance

The study sought to determine the link between minimum investment requirement and financial performance by focusing on the implication of non-earning assets relative to total assets controlled by the Deposit Taking SACCOs. In this regard, the study the amounts of non-earning assets owned by the Deposit Taking SACCOs as well as the figures of total assets from the financial statements of the entities under study. This figures would facilitate in determining the proportion of total assets that was comprised on non-earning assets, that is, investment requirements.

The study first sought to concisely depict the relationship between non-earning assets and total assets. These findings are shown in figure 4.10.

Figure 4. 9 Non-performing assets relative to total assets



The findings show that non-earning assets account for about 45% of the total assets owned by the Deposit Taking SACCOs. This therefore shows that other than loans, Deposit Taking SACCOs diversify to other forms of interests in significant proportions. This findings are consistent with the minimum investments requirements which necessitates the possession of a given level of assets before a financial intermediary is allowed to operate. This can thus explain the financial performance discussed earlier given that Deposit Taking SACCOs have leverage in the event there is a slump in the performance of loans. The declaration of assets as either loans or non-earning thus enables the allocation of incomes to respective investment source. These findings on the distinction of assets contrast with the views of Wanyoike (2013) on the regulation on minimum investments. According to Wanyoike (2013) the regulation on minimum investments promotes transparency and accountability in the banking sector including deposit taking Deposit Taking SACCOs since it is iminent that the performance of these institutions is of great concern to not only insiders but also the investing public domain.

The study further sought to determine the proportions of assets that was made of non-earning assets, that is, the investment requirement for each of the entities under study. The study thus computed the quotients and plotted the resulting ratios as shown in the figure below.

Figure 4. 10 Investment requirement

The investment requirement as plotted shows that among all the entities under study, the ratio lies between 0.3 and 0.5 with the average figure amounting to 0.44 for the Deposit Taking SACCOs used in the study. The findings show that the proportion of non-earnings on the total assets is relatively proportional for all Deposit Taking SACCOs under study thus supporting the presence of prudential regulatory framework on the same.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

From the data analysis and presentation discussed in the previous chapter the following discussions; conclusion and recommendations were arrived at. The conclusion and recommendations were founded on the objectives of the study. First, focus is placed on the summary of the findings and addressing of the study questions confirmation as derived from this study. Additionally, policy and further study recommendations which should be of interest to both management and policy makers are covered. Suggestions for further study are also captured as a way of filling the gaps identified in the study.

5.2 Summary of Findings

Prior inquiries notwithstanding the insufficiency of studies in this area and especially in the financial sector covering Deposit Taking SACCOs indicated that there are varied results on the effects that prudential regulatory framework had on financial performance in Kenya. The study sought to establish the effects of prudential regulation framework on the financial performance of Deposit Taking SACCOs in Kenya. For the period covering 2010 to 2014 the study found a general increase in the financial performance of Deposit Taking SACCOs as depicted by income levels with respect to equity. Moreover, the implication of prudential regulatory framework was evident on the financial performance of Deposit Taking SACCOs as depicted by the relatively uniform level on the return on investment among all the Deposit Taking SACCOs under study.

The study further revealed there was a strong relationship between the study variables. The study found that capital requirement, Liquidity requirement, investment requirement, and loan provisioning requirement were significantly influencing financial performance of Deposit Taking SACCOs in Kenya.

5.3 Conclusions

This study examined the impact of prudential regulatory framework on financial performance of Deposit Taking SACCOs in Kenya. The objective was arrived at by delving into the following research questions; what is the relationship between minimum liquidity requirements and financial performance of Deposit Taking SACCOs in Kenya?, what is effect of minimum capital requirements on financial performance of Deposit Taking SACCOs in Kenya?, what is the impact of loan provisioning requirements on Financial performance of Deposit Taking SACCOs in Kenya? And finally, what is the link between minimum investment requirement and performance of Deposit Taking SACCOs in Kenya?

The examination on the impact of prudential regulatory framework on financial performance among deposit taking SACCOs in Kenya contributes immensely to the theory on prudential regulatory framework in financial management in Kenya. The contribution strengthens the practice of financial management and in particular highlighting the challenges of implementing prudential regulatory framework in the financial system is valuable to the stakeholders.

Minimum liquidity requirements were found to implicate on uniformly as depicted by the relatively similar proportions of deposits with respect to loans among all the

Deposit Taking SACCOs under study. Disparities were however found on the levels of liquidity requirement as given by the ratio of liquid assets relative to liabilities of SACCOs. The extreme disparities were however confined to a negligible number of entities with a substantial number having a relatively equated liquidity requirement.

The study found that the minimum capital requirement was majorly anchored on equity as opposed to other forms of financing. This is explained by the relatively high proportions of equity among the total assets charged to the Deposit Taking SACCOs. The implication of prudential regulatory framework was thus evident in regulating the capital structure to influence the financial performance of the sector. Moreover, the capital requirement ratio as computed from a quotient of equity and total assets was found to be significantly high.

The implication of prudential regulatory framework was evident on the loan provisioning requirement as depicted by the low levels of non-performing loans among the Deposit Taking SACCOs under study. A computation of the loan provisioning requirement for all the entities found a mean of less that 30% in terms of the proportion of non-performing loans.

The study further found a level of similarity in the levels of investment requirements among all the Deposit Taking SACCOs under study. The study also established that the four independent variables formed a statistically significant model from the analysis of variance (ANOVA). This implies that the variables provided a good fit in explaining return on investment. The regression results show that a positive relationship exists between the independent variables and financial performance as

given by return on investment. Loan provisioning requirement was found to influence financial performance more immensely compared to the other variables.

The independent variables used in the study were found to be a good fit in explaining return on investment among Deposit Taking SACCOs in Kenya. Prudential regulatory framework can enhance financial performance more by focusing more on loan provisioning requirement as explained by the high implication given by the coefficient of loan provisioning requirement in the model. Investment return as computed in the model was found to statistically insignificant to the model in explaining financial performance.

5.4 Recommendations to Policy

The following policy recommendations were proposed to improve the overall management of SACCOs in Kenya. The recommendations for the regulator include the adoption of periodic monitoring and review of the implementation process of the prudential regulatory framework. This will ensure reviewing and validation of the positive as well as negative impacts in the implementation process.

Secondly, the average capital ratio of Deposit Taking SACCOs in Kenya as seen in the study leads to the recommendation that their management should leverage volatile incomes and this also affects the credit creation and liquidity function. Therefore, managers who invest their liquid assets can generate income and lift their financial performance. From the study, the Deposit Taking SACCOs can re-evaluate their approach towards issuance of loans. This is mainly because the level of non-performing loans was seen to be relatively higher that the prevailing levels on interest.

Such an analysis can be done factoring in the possibility of some of the non-performing loans reverting to performing loans, the availability of collateral to the loans, and the insurance policies currently in place to safeguard the loans.

Finally, given the high level on influence loan provisioning requirement and investment requirement on financial performance, prudential regulatory framework can be aligned towards maximizing this finding in improving the financial performance of Deposit Taking SACCOs even further. This is key to the growth and development of the financial intermediary industry in Kenya.

5.5 Areas for Further Research

The study revealed that prudential regulation contributes greatly to financial performance among the Deposit Taking SACCO's. This is evidenced by the *R-Square* which is the coefficient of determination that showed that the four independent variables in the model explain a big percentage of financial performance. However, it is also evident that governance has significant positive effect on performance among SACCOs especially with the advent of SASRA (Odera (2012). The study recommends further research on the impacts of other aspects such as corporate governance, cooperative model and quality of Staff on financial performance of Deposit taking SACCOs in Kenya.

This study further recommends an inclusion of commercial banks in a similar study as a control. Such a study can facilitate in determining the extent of similarities in the prudential regulatory framework and its implication on the financial performance of the entire banking and finance industry. The researcher recommends that future research can be directed towards authenticating the results of this study by conducting a comparable research among micro-finance institutions in Kenya

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APPENDICES

Appendix I: Introduction Letter

Cyrus Muinde Mutinda

South Eastern Kenya University

P.O BOX 170

Kitui.

Dear Sir/ Madam

RE: REQUEST FOR DATA

I am a Master's student in the School of Business and Economics carrying out research on **Impact of Prudential Regulatory Framework on Performance of Deposit Taking SACCOs in Kenya.** The purpose of this letter is therefore to kindly request your voluntary participation in this study by providing us with publications made by your entity containing information on performance and regulations affecting the entity. The information gathered shall be treated confidentially and shall be used for this research only.

Kindly sign this form if you agree to participate in this study.

Sign …….....Date……

Yours sincerely,

…….

Cyrus Muinde Mutinda

Appendix II: Introduction Letter from the University

SOUTH EASTERN KENYA UNIVERSITY
OFFICE OF THE DIRECTOR
BOARD OF POST GRADUATE STUDIES

P.O. BOX 170-90200
KITUI, KENYA
Email: info@seku.ac.ke

TEL: 020-2413859 (KITUI)
020-2531395 (NAIROBI)
E-mail: directorbps@seku.ac.ke

Our Ref: D61/KIT/20507/2014

Date: Thursday, February 04, 2016

Mutinda Cyrus Muinde
Reg: D61/KIT/20507/2014
Master of Business Administration
C/O Dean, School of Business and Economics

Dear Mutinda,

RE: PERMISSION TO PROCEED FOR DATA COLLECTION

This is to acknowledge receipt of your Master in Business Administration Proposal document entitled, *"Impact of prudential regulatory framework on financial performance of deposit taking Sacco's in Kenya".*

Following a successful presentation of your Master Proposal, the School of Business and Economics in conjunction with the Directorate, Board of Post graduate Studies (BPS) have approved that you proceed on and carry out your research data collection in accordance with your approved proposal.

During your research work, you will be closely supervised by Dr. Jared Ariemba and Ms. Anne Christine Kabui. You should ensure that you liaise with your supervisors at all times. In addition, you are required to fill in a Progress Report **(SEKU/ARSA/BPS/F-02)** which can be downloaded from the University Website.

The Board of Postgraduate Studies wishes you well and a successful research data collection as a critical stage in your Master of Business administration.

for Kiukai
Prof. Cornelius Wanjala
Director, Board of Postgraduate Studies

Copy to: Deputy Vice Chancellor, Academic, Research and Students Affairs
Dean, School of Business and Economics
Chairman, Department of Business & Entrepreneurship
Dr. Jared Ariemba
Ms. Anne Christine Kabui
Director, Kitui Campus
BPS Office- To file

Appendix III: Secondary Data Collection Sheet

Part 1: Financial Performance

1. Kindly indicate the following figure for your deposit taking Sacco in years specified.

a) Return on Equity

Financial Performance measurement	2010	2011	2012	2013	2014
Net income					
Total Equity					
Return on Equity(ROE)=Net Income/Total Equity					

Part 2: Prudential Regulatory Framework

a) Liquidity Requirements

Liquidity Requirements	2010	2011	2012	2013	2014
Total Savings					
Total Deposits					
Total Short Term Liabilities					
Liquid Assets = cash balances, bank balances					
LR= liquid assets/ Savings, deposits and other short term liabilities					

b) Capital requirement

Capital requirements	2010	2011	2012	2013	2014
Total equity = Share capital, Institutional Capital (Reserves and retained earnings)					
Total Assets					
CR = Total Equity/Total Assets					

c) Loan Positioning Requirements

Loan Provisioning Requirements	**2010**	**2011**	**2012**	**2013**	**2014**
Total Loans					
Total Non-performing loans					
LPR =Non-performing loans / total loans portfolio					

d) Investment Requirements

Liquidity Management measurement	**2009**	**2010**	**2011**	**2012**	**2013**
Non-Earning Assets -NEA (any other asset a part from Loans e.g. land and buildings)					
Total asset					
IR = NEA/Total Asset					

Appendix IV: Deposit Taking SACCOs in Kenya

No.	NAME OF SACCO	MEMB-ERSHIP	TOTAL ASSETS	TOTAL DEPOSITS	TOTAL LOANS
1	MWALIMU NATIONAL	60,961	28,600,850,746	19,903,134,406	22,114,592,339
2	HARAMBEE	80,851	19,919,702,761	12,811,082,129	15,988,483,092
3	STIMA	39,898	16,354,491,000	12,624,038,000	13,770,905,000
4	KENYA POLICE	46,910	15,691,033,000	10,185,874,000	12,653,819,000
5	AFYA	37,915	12,682,654,632	10,301,575,879	10,051,159,677
6	UNITED NATIONS	4,731	8,828,345,512	7,158,079,068	7,133,468,334
7	UKULIMA	36,159	8,294,183,624	6,004,712,254	6,211,101,944
8	UNAITAS	164,506	6,881,252,979	4,260,949,305	5,049,824,753
9	METROPOLITAN NATIONAL	60,891	6,706,442,027	3,731,412,756	5,696,280,176
10	IMARISHA	42,251	6,424,910,620	3,887,803,676	5,447,465,115
11	KENYA BANKERS	18,688	5,530,677,678	4,391,029,849	3,658,556,106
12	GUSII MWALIMU	24,460	5,514,432,037	3,045,450,050	4,714,023,813
13	KAKAMEGA TEACHERS	16,410	5,375,979,677	3,049,912,091	4,166,706,481
14	BANDARI	14,047	5,201,778,161	3,323,658,766	4,588,283,932
15	MAGEREZA	19,733	4,429,668,100	2,829,079,390	2,548,193,273
16	HAZINA	15,396	4,317,912,171	3,526,141,250	3,571,664,168
17	NYERI TEACHERS	9,549	4,159,239,485	2,400,736,473	2,922,314,031
18	BORESHA SACCO	51,843	3,836,776,532	2,197,417,520	2,823,134,579
19	IMARIKA	47,946	3,674,950,793	2,516,258,266	2,875,509,835
20	SHERIA	9,451	3,412,520,805	2,511,750,503	2,641,651,562
21	MENTOR	9,167	3,283,953,220	2,476,141,469	2,539,002,896
22	TOWER	21,925	3,159,714,687	2,380,810,683	2,560,574,712
23	KWETU SACCO	10,032	2,981,231,577	1,477,477,017	830,963,558
24	BINGWA	109,635	2,828,557,593	1,665,513,998	2,185,725,108
25	COSMOPOLITAN	10,565	2,752,896,588	2,355,567,696	2,362,068,515
26	SOLUTION SACCO	10,478	2,575,307,690	1,642,898,859	2,010,874,440
27	WAUMINI	18,399	2,564,239,534	1,856,455,371	2,065,258,749
28	NACICO	14,435	2,474,217,186	1,466,013,416	1,210,381,328
29	KITUI TEACHERS	13,548	2,468,569,238	1,806,004,407	2,083,575,828
30	WINAS	10,005	2,324,387,263	1,640,479,981	2,052,108,087
31	K-UNITY	129,903	2,311,727,406	1,724,506,451	1,375,387,217
32	MOMBASA PORT	4,336	2,292,676,279	1,233,214,063	2,080,588,093
33	OLLIN	6,003	2,279,088,108	1,666,847,497	2,010,271,309
34	SAFARICOM	7,214	2,207,420,777	1,891,804,251	1,996,567,897
35	NDEGE CHAI	30,383	2,166,771,382	1,342,290,630	1,768,257,246
36	JAMII	15,626	2,156,623,933	1,532,118,333	1,819,286,536
37	CAPITAL	39,371	2,039,906,541	1,381,174,187	1,498,467,917
38	CHAI	9,851	1,981,027,622	1,416,518,995	1,805,583,154
39	MURATA	93,348	1,945,138,029	1,228,158,909	1,225,746,794
40	TRANS NATION	13,707	1,935,084,309	1,440,639,141	1,533,734,070
41	CHUNA	4,208	1,925,519,198	1,296,255,998	1,870,979,355
42	TAIFA	106,606	1,847,765,920	1,500,078,028	824,410,587
43	NAKU	14,883	1,777,251,510	1,386,048,982	1,333,646,788
44	EGERTON UNIVERSITY	4,777	1,767,978,944	1,171,925,103	1,313,827,511
45	MAISHA BORA	4,322	1,729,964,896	1,432,129,875	1,559,868,054
46	YETU	23,815	1,699,301,395	1,097,902,733	1,169,889,815
47	ASILI COOPERATIVE	9,333	1,691,501,539	1,237,212,837	1,103,023,357
48	FORTUNE	96,234	1,639,046,137	841,089,187	1,458,670,077
49	KENPIPE	2,279	1,633,256,461	1,302,138,657	1,363,015,909
50	SHIRIKA	4,722	1,564,856,337	1,341,720,287	1,236,678,713
51	KENYA HIGHLANDS	52,981	1,555,481,960	1,042,106,883	820,912,642
52	UNISON	4,071	1,539,892,960	994,378,330	1,280,031,130
53	MOI UNIVERSITY	3,150	1,455,122,339	824,524,396	593,962,338
54	NGARISHA	10,966	1,375,329,336	823,024,392	847,004,044
55	ARDHI	7,008	1,343,127,971	1,125,068,467	1,153,425,290
56	WANANDEGE	5,801	1,340,085,161	1,091,873,993	702,306,559
57	KENVERSITY	4,035	1,290,960,811	1,054,056,814	1,099,546,271
58	UFUNDI	5,237	1,285,717,988	333,183,576	251,091,559
59	WARENG TEACHERS	5,327	1,229,164,006	853,934,261	945,475,478

60	TAI	30,393	1,210,723,206	783,005,540	935,953,247
61	WANANCHI	57,776	1,172,329,851	608,621,179	833,756,353
62	TEMBO	2,065	1,101,352,608	825,306,143	874,904,519
63	NATION STAFF	2,710	1,087,732,500	887,644,572	1,007,215,206
64	WANAANGA	3,614	1,079,081,877	929,606,548	813,373,386
65	WAKENYA PAMOJA	158,548	1,073,857,201	346,407,540	523,621,837
66	NASSEFU	3,039	1,058,052,994	705,159,262	832,286,504
67	TELEPOST	2,985	1,004,939,503	631,206,563	740,241,504
68	MWITO	5,839	1,001,852,980	862,671,558	917,512,427
69	KITE	5,916	988,941,146	604,802,252	574,333,400
70	QWETU	4,843	968,370,832	668,663,021	745,080,660
71	UKRISTO NA UFANISI	21,912	931,234,975	801,615,187	867,108,810
72	NAWIRI	98,258	910,638,014	636,936,908	294,721,543
73	ELIMU	11,801	909,767,720	625,345,500	583,036,628
74	TRANS-ELITE COUNTY	3,261	907,459,536	578,289,769	485,153,516
75	SUKARI	33,664	895,268,827	606,870,612	583,917,658
76	KENYA CANNERS	4,998	865,837,848	624,982,002	622,913,141
77	SIMBA CHAI	10,726	839,475,193	597,509,748	737,002,713
78	SOUTHERN STAR	50,721	787,918,649	451,789,169	438,835,050
79	SMARTLIFE	3,163	786,753,168	536,277,795	671,325,109
80	TRANSNATIONAL	4,263	784,818,228	483,678,133	585,022,010
81	JITEGEMEE	2,626	778,476,540	285,912,069	383,243,044
82	DIMKES	12,259	691,003,143	617,512,856	623,646,198
83	GITHUNGURI DAIRY	16,357	689,169,601	532,836,693	488,124,244
84	2NK	477	670,974,828	353,686,327	221,724,639
85	ORIENT	4,168	655,937,848	359,259,624	572,330,035
86	COMOCO	2,262	655,136,519	509,448,322	525,210,520
87	FARIDI	4,934	643,827,206	402,801,952	333,826,582
88	BIASHARA	41,205	623,988,138	431,292,342	478,077,403
89	ECO-PILLAR	6,965	605,451,246	433,795,633	247,127,982
90	KINGDOM	10,519	580,208,026	462,717,954	436,486,350
91	FUNDILIMA	1,952	562,937,728	453,640,545	447,107,953
92	UNIVERSAL TRADERS	36,807	561,353,942	321,205,368	439,450,867
93	TRANSCOM	1,355	555,717,935	247,533,975	207,668,564
94	NAROK TEACHERS	2,522	554,396,621	385,180,526	473,500,806
95	PRIME-TIME	2,320	548,028,126	444,585,947	413,587,712
96	MAFANIKIO	3,609	534,444,329	322,200,801	360,786,989
97	DAIMA	28,277	504,089,724	323,798,589	245,146,562
98	AIRPORTS	1,523	502,861,315	355,029,493	364,277,002
99	STEGRO	18,238	497,938,021	233,382,882	205,705,243
100	MUKI	31,447	497,173,259	355,581,761	368,069,394
101	SKYLINE	18,687	489,472,195	388,304,555	367,195,706
102	KWALE TEACHERS	1,815	470,710,679	316,341,584	98,744,451
103	MOSACCO	54,172	426,215,850	174,892,059	201,019,929
104	MAGADI	1,299	424,339,220	326,128,476	301,762,103
105	MARSABIT TEACHERS	984	392,466,567	313,468,645	259,552,480
106	TARAJI SAVINGS	3,674	380,570,101	187,665,668	138,456,831
107	DHABITI	25,881	372,368,460	113,584,706	273,370,070
108	THAMANI	8,742	360,139,809	194,187,243	243,029,304
109	PATNAS	6,205	348,243,395	125,698,102	107,070,963
110	NAFAKA	1,197	347,934,128	265,096,377	284,171,909
111	VISION POINT	14,915	341,775,222	229,610,980	200,155,075
112	NYAMIRA TEA FARMERS	14,678	332,055,189	123,361,198	221,535,014
113	CENTENARY	10,282	331,464,589	268,544,562	296,181,606
114	NDETIKA RURAL	8,680	326,234,997	236,323,849	273,553,942
115	KIMBILIO DAIMA	12,746	301,670,247	213,615,181	195,210,653
116	COUNTY	7,137	299,473,102	156,362,231	153,246,234
117	MWINGI MWALIMU	1,468	290,426,297	210,115,245	224,281,160
118	KENYA ACHIEVAS	28,023	284,554,689	117,343,637	99,504,532
119	LAINISHA	6,993	284,500,118	101,506,537	105,659,865
120	MAUA METHODIST	1,518	273,544,798	171,352,604	189,475,354
121	JUMUIKA	1,135	272,305,757	170,977,491	111,892,686
122	KMFRI	2,825	241,036,762	190,669,051	197,735,970

123	PUAN	1,113	237,589,980	163,986,677	166,171,262
124	WEVERSITY	1,471	229,351,510	168,137,719	189,374,000
125	TIMES U	11,552	228,200,263	166,229,041	185,437,329
126	BARAKA	10,824	225,234,377	148,407,340	132,222,564
127	DUMISHA	10,346	221,860,934	127,862,760	130,130,994
128	KONOIN TEA GROWERS	14,110	216,671,281	93,204,923	164,844,045
129	WAKULIMA COMMERCIAL	30,644	211,392,555	147,970,157	123,067,824
130	NANDI HEKIMA	9,691	205,779,130	99,190,802	160,413,100
131	IMENTI	4,574	201,077,184	144,739,967	131,562,065
132	VISION AFRICA	12,058	191,609,074	153,334,329	154,545,599
133	STAKE KENYA	3,969	187,285,093	121,921,964	104,865,430
134	SUPA	1,594	181,986,379	143,008,166	145,338,077
135	SIRAJI	6,381	179,633,704	131,399,193	129,051,686
136	LAMU TEACHERS	6,429	176,333,976	103,543,891	97,189,506
137	NYALA VISION	13,031	168,151,382	128,575,152	89,919,818
138	WASHA	912	164,708,091	108,376,133	105,332,797
139	TENHOS	7,850	162,839,091	96,380,800	105,453,889
140	NDOSHA	3,612	162,213,142	94,682,629	115,466,184
141	LENGO	5,104	159,532,926	68,040,472	55,758,215
142	NYAMBENE ARIMI	5,829	156,992,985	99,672,265	114,454,463
143	KENYA MIDLAND	12,582	155,114,612	28,031,681	96,275,595
144	SMART CHAMPION	4,014	153,485,709	60,723,112	112,043,789
145	JACARANDA	481	149,455,124	85,774,430	78,911,010
146	ELGON TEACHERS	669	143,675,000	99,046,670	68,903,942
147	MUDETE TEAFACTORY	6,235	142,131,065	99,858,795	68,165,499
148	UFANISI	508	139,229,635	100,405,527	120,408,437
149	RACHUONYO TEACHERS	1,055	136,306,239	87,796,099	112,473,532
150	KIAMBAA DAIRY RURAL	2,861	132,509,375	101,786,348	111,252,337
151	SOTICO	4,335	126,784,283	88,908,277	97,504,715
152	ENEA	14,948	125,896,653	94,944,653	39,283,689
153	NANDI FARMERS	1,600	122,168,389	69,181,930	74,107,742
154	NANYUKI EQUATOR	899	121,029,874	32,939,199	90,280,389
155	SUBA TEACHERS	722	117,152,577	92,832,087	76,751,522
156	BANANA HILL MATATU	1,935	107,557,674	75,315,954	73,807,507
157	FARIJI	3,924	103,040,072	65,524,900	86,358,779
158	AINABKOI RURAL	2,588	101,988,662	67,236,443	50,986,006
159	NUFAIKA	678	99,276,284	76,814,117	62,801,761
160	TRANSCOUNTIES	1,882	93,363,626	68,218,400	64,192,681
161	NYAHURURU UMOJA	1,621	91,290,359	62,128,079	72,135,405
162	AGROCHEM	447	91,288,867	64,371,703	70,388,161
163	BARATON UNIVERSITY	350	84,185,570	55,991,090	66,064,224
164	KIPSIGIS EDIS	2,569	82,246,069	57,478,186	67,998,732
165	MILIKI	4,030	81,726,361	35,482,105	33,814,151
166	ILKISONKO	2,809	79,044,927	53,089,195	69,242,213
167	UNI-COUNTY	474	77,195,455	53,546,423	55,527,512
168	KOLENGE	1,303	76,168,786	47,776,370	34,971,281
169	MWIETHERI	3,612	66,957,299	49,998,724	16,659,323
170	NEST	5,950	66,804,226	36,818,713	33,595,103
171	KORU	1,335	64,588,552	40,506,575	34,456,354
172	GOOD FAITH	2,678	62,345,243	41,164,997	56,248,725
173	UCHONGAJI	2,581	57,045,017	41,599,735	29,925,959
174	KATHERA	1,329	55,980,771	40,617,027	43,450,803
175	ALL CHURCHES	3,170	50,537,467	37,335,286	33,613,743
176	GASTAMECO	4,236	44,314,419	22,712,776	23,191,758
177	KAIMOSI	3,045	39,834,263	17,837,912	24,034,159
178	VIHIGA COUNTY	3,243	30,900,162	14,864,912	12,551,644
179	GOODWAY(TESCOM)	823	28,321,422	16,456,119	21,154,254
180	GREEN HILLS	2,372	26,527,415	11,942,986	13,838,494
181	MAONO DAIMA	3,855	12,272,756	11,864,188	11,175,052
Grand Total		**3,008,497**	**301.5 Billion**	**205.97 Billion**	**228.5 Billion**

Source: SASRA database (2014)