

**THE EFFECT OF FINANCIAL INNOVATIONS ON CREDIT  
PROVISION BY SAVINGS AND CREDIT CO-OPERATIVE  
SOCIETIES IN KENYA**

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**DECLARATION**

I declare that this research project is my own original work and to my best of my knowledge it has not been submitted for a degree award in any other University or Institution of higher learning.

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## **DEDICATION**

Dedicated to my wife Triza and our children Victor and Nicholas for their love, affection, encouragement, motivation, understanding, patience and support throughout my period of studies. To my larger family and friends for their prayers, support and encouragement.

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## **ABBREVIATIONS AND ACRONYMS**

ATM	Automated Teller Machines
ADC	Annual Delegates Conference
AGM	Annual General Meeting
BBF	Burial Benevolent Fund
BOSA	Back Office Service Activity
FOSA	Front Office Service Activity
LCP	Levels of Credit Provision
LR	Liquidity Ratio
NP	New Products
PAT	Profit after Tax
RTGS	Real Time Gross Settlement
SACCO	Savings and Credit Co-operative Society
SASRA	Sacco Societies Regulatory Authority
SME	Small Micro Entrepreneurs
SMS	Small Messaging Services
SPSS	Statistical Package for Social Sciences
USA	United States of America



## **ABSTRACT**

Policy makers have given considerable attention to innovations that have removed barriers to credit access to majority of Kenyans. This is as a result of poor credit worth assessments and unavailability of credit information which threatens credit access to people whose credit information cannot be effectively accessible or verified. This study was aimed at assessing the financial innovations that have facilitated improvement in credit access in SACCOs in Kenya. The study is an exploratory survey of deposit taking SACCOs in Kenya that were registered as at 31<sup>st</sup> December 2013. Primary and Secondary data was collected using questionnaires and reports from SASRA, the SACCOs regulator, where all the issues on the questionnaire were addressed. Descriptive statistics were used to analyze data. Furthermore, descriptions were made based on the results of the tables. The study found that financial innovations have played a key role in availing credit to members of Saccos in Kenya. The study established that there was strong relationship between advancement of credit and financial innovations through introduction of new products. The findings from the study will be important in identifying the challenges the SACCOs encounter that will have to be mitigated through financial innovations as arched in Kenya Vision 2030.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the study

Worldwide, financial access has become an increasingly important development metric, as one of the factors which can drive widespread economic development. Access to credit has been identified as key element for SMEs to succeed in their drive to build productive capacities, to compete, to create jobs and to contribute to poverty elevation in developing countries (Cracknell, 2012).

A large proportion of households in developing countries lack access to financial services which impedes economic growth and development. In 2007, over 70 percent of Kenyans households did not have bank accounts or reliable source of finance (Ndung'u, 2013) There is a growing interest worldwide in small and medium enterprises as an engine of growth and employment. However, such enterprises are faced with several challenges which include informality and lack of access to capital (Magnoni, 2013) The role of innovations in the economic development is indisputable. The general definition of innovations explains that they appear when new ideas, solutions and instruments are implemented in order to change the conditions of business entity and to improve its situation. The application of innovations increases the competitiveness of a business entity and creates value for its owners (Blach, 2011)

### **1.1.1 Financial Innovation**

Financial innovation seems to occur in various forms and financial institutions, and can diffuse into any sectors of the economy. It is observed that many new types of financial assets and liabilities have emerged recently. Some of these new elements appear in what we might strictly call “banking”, as commercial banks are major financial service providers in many economies. The section that follows will give an account of the driving forces behind the surge in innovation and the adoption of new technology in the banking sector (Miller and Merton, 1992)

The term financial innovation has been used in variety of contents to refer to a wide range of changes and developments affecting financial markets. It is the methods by which financial services are provided and the introduction of products and procedures in the wake of deregulation. In recent decades, financial sectors of many countries have undergone significant changes against the background of general trend towards deregulation, globalization and development of the internet and e-commerce. Technological innovations have now made it possible to extend financial services to millions of poor people at relatively low cost. Kenya’s innovative FOSA services through registration by SASRA represent a good example of how low cost approaches that use modern technology can effectively expand the financial service frontier. During the 1990s Kenya experienced barriers to trade through Government state monopoly which were removed after liberalized stance and the Government’s efforts in making it possible for competitive supply of mobile telephony (Magnoni, 2013).

### **1.1.2 Credit Provision**

Finance has been identified in many business surveys as the most important factor in determining the survival and growth of small and medium sized enterprises in both developed and developing countries. More ever, banks in many developing countries have traditionally lent to the Governments, which offers less risk and higher returns that resulted to crowd out most private sector borrowers and increased the cost of capital to them. As a result, commercial banks are generally biased towards large corporate borrowers, who provide better business plan, have better credit ratings, more reliable financial information, better chances to success and higher profitability for the banks. Lack of access to formal loans is often cited as a major constrain for business owners. Unsuccessful business owners claim that a lack of credit access constrained their businesses more than successful ones who may also lack credit access (Magnoni, 2013)

Credit management greatly influences the success or failure of commercial banks and other financial institutions. This is because the failure of deposit banks is influenced to a large extent by the quality of credit decisions and thus the quality of the risky assets. He further notes that, credit management provides a leading indicator of the quality of deposit banks credit portfolio. A key requirement for effective credit management is the ability to intelligently and efficiently manage customer credit lines. In order to minimize exposure to bad debt, over-reserving and bankruptcies, companies must have greater insight into customer financial strength, credit score history and changing payment patterns (Nzota, 2004)

### **1.1.3 Financial Innovations and Credit Provision.**

Productivity and innovation are also linked to financial development more directly. Aghion et al (2005) argue that technological catch up is determined by thresholds in financial development. Innovation is costly and requires mature financial systems, so productivity is constrained in the absence of finance. Other studies support these findings (Gatti and Love 2008) estimate the impact of access to credit on firm productivity in Bulgaria and find a strong association between firm productivity and access to credit (Sharma, 2007) finds that small firms have a higher probability of innovating in countries with high financial development (Ayyagari et al. 2007) present evidence that innovation is higher in firms that have access to finance. Finally, although globalization may boost innovation Lane and (Gorodnichenko, 2008), financial development may be crucial for a country's ability to capture the technological spillovers from foreign direct investment (Alfaro et al., 2004)

While policymakers like to talk in general terms about enterprise and small firms, not all firms will drive the economic recovery. The majority of SMEs create few jobs, with a tiny minority of SMEs having a disproportionate impact on the national economy. In particular, innovative small firms – those introducing new products, processes or business models – are most likely to create new markets, achieve rapid growth, and help the economy recover. To do this, innovative small firms need finance to invest and grow.

Yet it is innovative small firms which often find it the hardest to obtain finance. They may have risky business models, which are important for new markets but difficult for banks to value. They are often more reliant on intangible assets, rather than physical property, however, intangibles are difficult to value and hard to use as collateral. Because of this, the most important firms for the economy are often those which find it hardest to obtain finance. However, while there is good evidence of a general problem in access to finance in the economy, we know little about how the credit crunch and its aftermath has impacted access to finance for innovative small firms in particular (Big Innovation Centre, 2013)

#### **1.1.4 SACCOs in Kenya**

Societies form a significant part of the larger Cooperative sector in Kenya under the Ministry of Co-operative Development and Marketing (MoCD&M). The Ministry is responsible for the development of the Cooperative sector through policy and legal framework to facilitate attainment of the national social-economic goals in Kenya. Saccos comprise over 50% of all cooperatives in Kenya and as financial institutions they play a critical role of financial intermediation in Kenya's financial landscape focusing mostly on personal development, small and micro enterprise sector of the economy.

According to the Supervision Report (2010) the sub sector comprises of large Saccos, some of which have a total asset base of over Kshs. 15 billion and the very small Saccos having asset base of under Kshs. 10 million and are well spread across the country from the large cities to the rural Kenya The Saccos in Kenya are allowed to operate deposit accounts from their members through a facility called Front Office Activity (FOSA) upon

registering with SASRA. The Sacco Societies Regulatory Authority (SASRA) is a creation of the Sacco Societies Act, 2008. The Authority's establishment falls within the broad Government of Kenya's reform process in the financial sector which has the dual objectives of protecting the interests of Sacco members and ensuring public confidence towards the Sacco subsector. This ultimately will spur economic growth through mobilization of domestic savings, deepening financial access and affordable credit to Sacco members (Ademba, 2010)The latest report from SASRA indicates that there were 184 SACCOs that were registered by 31 December 2013

## **1.2 Research Problem**

Several studies have been conducted in trying to answer the question of financial innovations and their role in finance, states that innovation leads to technological progress through purposeful research and development and invention of completely new products and progress which shares a strong connection with the provision of finance services. Hence his studies are centered to address the impact of a country's financial development on TFP via the innovation channel (Eva, Debla and Noris, 2010)

According to Access to finance for innovative small firms remains a significant problem and addresses the needs for SMEs to access finance in order to raise productivity and create jobs and growth (Haiba, 2013)However although the researchers have successfully tried to address the role of innovation progress in improving financial services they have not made effort to compare the credit process between the big institutions and the small innovative financial institutions and explain why some of these small institutions successfully use innovations to reach out to a large fraction of credit applicants.

Financial innovation presents more convenience, efficiency and security to commercial banks customers resulting to more demand (uptake) for the new innovations. Demand for traditional payment systems reduces as customers switch to the more effective payment systems (Nyathira, 2012)

In Kenya, some innovative small firms have been able to be more accessed by their unique type of clients e.g. SACCO members hence requiring them to design products that suit their members and ignoring the too much regulatory loaning policies that require ambiguous conditions like real collaterals with many loan applicants cannot afford. Further study has been done in the empirical investigation on the determinant of leverage of Savings and Credit Societies (SACCOs) in Kenya in which case there was found to have a significant relationship between leveraging and liquidity, growth rate, firm size and profitability (Ochieng, 2013) Therefore this study is aimed at filling this gap and answering the question: What is the effect of financial innovations in providing credit in Kenyan Co-operative Societies?

### **1.3 Objective of the Study**

To establish the effect of financial innovations used by Saccos on credit provision.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The review of literature in this section covers the theoretical framework and the empirical studies of the past work on financial innovations and access to credit by individuals and firms. The study researches on the financial innovations in the financial sector and also how credit access has been impacted by their financial performance.

#### **2.2 Theoretical Review**

##### **2.2.1 Circumvention Innovation Theory**

Many forms of government regulations and controls, which have the same property of implicit taxation, embarrass the profitable activity engaged by the company and the opportunity of earning profits so the market innovation and regulation innovation should be regarded as the continuous fighting process between independent economic force and political force. Because financial industry is special, it has the stricter regulation. Financial institutions deal with the status such as the reduction of profits and the failure of management induced by the government regulations in order to reduce the potential loss to the minimum. Therefore financial innovation is mostly induced by the purpose of

earning profit and circumventing government regulations. Kanes' theory is seen to be different from reality because the regulation innovation he assured is always towards the direction of reinforcing regulation. However, the regulation innovation in reality is always towards the direction of liberal market innovation (Kane, 1981)

### **2.2.2 The Regulation Innovation Theory**

It was introduced by Scylla R. (1982) He argued researching financial innovation from the perspective of economy development history. Financial innovation connects with social regulation closely, and it is a regulation transformation which has mutual causality with economic regulation. They said that it is very difficult to have space of financial innovation in the planned economy with strict control and the pure free market economy, so any change lead by regulation reform in financial system can be regarded as financial innovation. In this theory, which expand the scope of financial innovation, government activity is also regarded as the origin of financial innovation but it regards regulation innovation as one part of financial innovation.

### **2.2.3 The Constraint Induced Financial Innovation Theory**

The theory pointed out that the purpose of profit maximization of financial institutions is the key reason of financial innovation. There are some restrictions (Including external handicaps such as policy and internal handicaps such as organizational management) in the process of pursuing profit maximization. Though these restrictions not only guarantee the stability of management, they reduce the efficiency of financial institution so that financial institutions strive towards casting them off (Silber, 1983).

### **2.2.4 Transaction Cost Innovation Theory**

The theory thought that the dominant factor of financial innovation is the reduction of transactions costs, and in fact, financial innovation is the response of the advance in technology which caused the transaction costs to reduce. The reduction of transaction cost can stimulate financial innovation and improvement in financial services. The theory studies financial innovation from the perspective of microscopic economic structure change. It thought that the motive of financial innovation is to reduce the transactions cost. It explained from other perspective that the radical motive of financial innovation is the financial institutes' purpose of earning benefits (Hickins, 1983)

Desai and Low, (1987) thought financial innovation is the method which can make integrity of financial markets come true. According to location theory, they advanced the financial innovation microscopic economic model utilized this theory to confirm and measure the gap in the scope of acquirable product in financial markets, which indicates the potential opportunity of the new products' innovation and promotion.

### **2.3 Determinants of Credit Provision**

There are several determinants of credit provision as that have been explained in the past studies. These include financial innovations, liquidity, profitability, size of the firm,

government lending policies etc. However for the purpose of this study three determinants will be discussed thus;

### **2.3.1 Financial Innovations**

Despite substantial efforts and a vast network of rural banks the rural poor still have very little access to formal finance and informal lending remains strong. New micro finance approaches designed to deliver finance to the poor have emerged and some have shown promise in India (Srivastena, 2005)

The financial industry made a number of efforts throughout the 1990s to provide additional borrowing opportunities to household traditionally constrained by the credit markets. The ability of all households to obtain their desired debt levels increased after 1993 and most dramatically between 1992 and 1998 in the USA (Lyons, 2005)

The financial system has evolved in many ways during the past 40 years. Some of this evolution has been market-driven, some owes to government policy, and some has arisen from changes in attitudes. Moreover, households that previously had some access to credit have likely gained improved access in terms of both the amount of credit and the consistency of its availability under different macroeconomic conditions. In terms of government policy, one crucial change was the phasing out of Federal Reserve Regulation, which had set ceilings on interest rates that banks paid on deposits, without this regulation, increases in market interest rates pushed up the cost of funds but did not

suddenly curtail their supply and therefore had a more muted effect on spending. Households also seem to have become more willing to borrow, perhaps due to a greater familiarity with the process of obtaining credit and reduced stigma of being in debt. However, an important caveat is that, if households carry a lot of debt under good economic conditions, they might be unable or unwilling to increase their indebtedness when conditions deteriorate (Carroll and Dunn, 1997)

Neil, Hiba and Cowling, (2014) suggest that problems remain for innovative small firms, and that this is not simply due to risk profiles. In fact, using standard credit scores, there are very few substantive differences in risk profiles between innovative and non-innovative firms. Since the analysis of Schumpeter, finance has been seen as a vital part of innovation processes.

(Ho, 2006) It should be noted that financial innovation is more than a business action taken by private enterprises. In fact, it can exert influence on monetary policy taken by central bank or monetary authorities. Monetary policy targeted at certain macroeconomic variables is essentially a financial process, with the financial system as the interface linking central-bank policies and the real economy through the monetary transmission mechanism. Hence, any innovation development that affects the structures and conditions of financial markets will have the potential to exert effect on the transmission mechanism.

### **2.3.2 Profitability**

Early studies on bank profitability were provided by (Short, 1979) and (Bourke, 1989). Then, in order to identify the determinants of bank performance, numerous empirical studies were held. In recent literature, the determinant of bank profitability is defined as a function of internal and external determinants. Internal determinants are related to bank management and termed micro or bank specific determinants of profitability (Gungor, 2007). The external determinants are reflecting economic and legal environment that affects the operation and performance of banks. If banks use provisions to smooth earnings, there should be a positive relationship between credit provision and earnings. Evidence of the existence of earnings smoothing through provisions remains fairly strong, at least for industrialized countries (Pérez et al 2008). In a few papers, provisions are found to vary inversely with earnings when they are negative. Meanwhile, studies on emerging markets have not found evidence for earnings smoothing; in fact, earnings have been found to negatively affect provisioning in emerging Asia Laeven and Majnoni, (2003), Craig et al (2006)

### **2.3.3 Liquidity**

In this paper we analyze how shocks to the banking sector and more broadly to financial markets affect the intra-firm provision of trade credit, a substitute form of credit. The hypotheses we take to the data are based on trade credit theories according to which suppliers may provide liquidity to customers whenever they experience a liquidity shock (Wilner (2000), Cuñat (2007)). Accordingly, when liquidity in the financial markets is scarce firms with more financial slack are in a better position to provide liquidity insurance through an increased amount of trade credit provided to their clients. The

supply-driven nature of the 2007-2008 crisis provides a unique opportunity to study the role of alternative sources of financing in compensating for unavailable credit from banks and financial markets.<sup>1</sup> Contrary to other financial disruptions which have their roots in the real sector, the 2007-2008 crisis is largely attributed to a reversal in the real estate market together with a perceived lack of transparency of the investment portfolios of financial institutions, leading to severe balance sheet problems in the financial sector, and consequently to a lending contraction.<sup>2</sup> The effects of this lending contraction on demand for credit were contained prior to the bankruptcy of Lehman Brothers in September 2008 (Almeida et al. (2010), Duchin, Ozbas, and Sensoy (2010)). This situation allows us to test whether an exogenous and unexpected shock to the supply of bank credit causes an increase in the amount of trade credit extended by firms, as a function of their access to liquidity.

The 2007-2008 crisis provides an ideal scenario to study the role of trade credit as a substitute form of credit when other alternative sources of financing from banks and financial markets are not available. Our main hypothesis is based on trade credit theories that provide insights into why suppliers are willing to offer trade credit when firms experience temporary financial difficulties (Petersen and Rajan, 1997; Wilner, 2000; Cuñat, 2007). According to these theories, suppliers have an equity stake on their clients, i.e. an interest in their survival due to valuable long-term business relationships, and therefore they may be more willing to help their clients as long as they have sufficient liquidity slack to support the additional credit extension.

## **2.4 Empirical Review**

Financial innovation is a central dimension of critical economic change. Economic change revolves around innovation, entrepreneurial activities and markets power. Innovation- originated market power could provide better results than the invisible hand and price competition. Technological innovation often creates temporary monopolies, allowing abnormal profits that would soon be completed away by rivals and imitators. These temporal monopolies were necessary to provide the incentive necessary for firms to develop new products and process Schumpeter, (1932)

In what environments are firms successful in terms of innovation and productivity (Coe, 1997) find that good institutions and high levels of human capital encourage innovation. Firm performance is also influenced by the investment climate (Dollar, 2005) find that the investment climate measured with indicators such as power outages and customs delays accounts for a significant portion of the variation in garment-industry firm performance in Bangladesh, China, India, and Pakistan Dollar, 2006) estimate that international integration and therefore possibly the potential to adopt foreign technologies is higher in countries with a better investment climate.

Frame and White, (2004) the rapid rate of financial innovation over the past few decades is widely recognized as stylized fact. The passage from Merton and Miller (1986) is typical and the world revolution is entirely appropriate for describing the changes in financial institutions and instruments that have occurred in the past twenty years.

Innovation is costly and requires mature financial systems, so productivity is constrained in the absence of finance. Other studies support these findings Gatti and Love (2008) estimate the impact of access to credit on firm productivity in Bulgaria and find a strong



association between firm productivity and access to credit (Sharma, 2007) finds that small firms have a higher probability of innovating in countries with high financial development (Ayyagari, 2007) present evidence that innovation is higher in firms that have access to finance. Finally, although globalization may boost innovation (Lane, 2009) and (Gorodnichenko, 2008), financial development may be crucial for a country's ability to capture the technological spillovers from foreign direct investment (Alfaro, 2004)

Financial innovation presents more convenience, efficiency and security to commercial banks customers resulting to more demand for the new innovations. Demand for traditional payment systems reduces as customers switch to the more effective payment systems. Productivity and innovation are also linked to financial development more directly (Aghion, 2005) argue that technological catch up is determined by thresholds in financial development. Increasing productivity requires a firm to either push the frontier of knowledge or to converge towards it. The literature suggests that the level of productivity and the likelihood of innovation, through invention or adoption, depend on both on the institutional environment and the availability of financing. In fact, some have suggested that we should think of finance, or financial sector development, as a theory of TFP Eros (Cabrillana, 2008)

Nyathira, (2012) found that financial innovation in payment systems result into improved financial performance of commercial banks and thereby to that of the banking sector as a whole. This is supported by the positive correlation between profit after tax and exceptional items and Real Time Gross Settlement transactions turnover.

Liquidity is computed by dividing current assets by current liability. Liquidity represents the capital amount that is available for use as expenditure or in investment. It also shows the ability of a firm to meet their current liabilities as and when they fall due. Excessive amounts of current assets owned by a firm would perhaps increase the chances of internal funding resulting in a relation between leverage and liquidity (Ochieng, 2013)

## **2.5 Summary**

The studies that were done in the past generated a closer view of how financial innovations affect financial performance in the financial sector. The theoretical review which involved the studies of the theories of financial innovations will enable the researcher to be able to clearly understand the arrears under interest in order to fill the gap that exists between financial innovations and credit provision. This will help future researchers to come up with new theories that will be applied in the changing dynamics of financial performance expectations especially the credit provision by SACCOs.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the methodology that was used to carry out the study. The chapter considers in detail the methods that were used to collect primary or secondary data required in the study. In this chapter, the researcher discusses the research design and population size used. The researcher also discusses how collected data was analyzed giving details of any models or programmes that were used in analysis with reasons as to why these particular models or programmes were applied.

#### **3.2 Research Design**

This survey will adopt use of survey design which is descriptive in nature. Both primary and secondary data will be used in the analysis. A survey of financial services provided

by SACCOs will be done through administering same questions and generalizing the findings. Descriptive characteristics of how financial innovations affect the provision of credit is identified will be used to validate the problem of this study.

### **3.3 Population**

The population of study will be 184 duly licensed to carry out deposit-taking Sacco business in Kenya for the financial year ending on 31st December, 2014. The study assumes all the SACCOs regulated by SASRA have similar operational characteristics.

### **3.4 Sampling Design**

A convenient sampling design will be used using a Sample size of 20 registered SACCOs where an individual would volunteer to participate. The participants should be the top managers of the respective SACCOS and are expected to be familiar with the products of the SACCO for the last four years.

### **3.5 Data Collection**

The study will use primary data obtained from a survey of managers of different Saccos using questionnaires. Data collection will be done in a period not exceeding a month which will also entail phone calls and emails. Field visits to forward transmittal letter to the respondents. Questionnaires will be administered in hard copies.

#### **3.5.1 Data Validity and Reliability**

The questionnaire proved to be a valid and reliable instrument as Polikandrioti et al (2011) concluded in their research. This resulted from 702 patients sampled from which a high repeatability of all sub-scales of questionnaires was identified through intra- class correlation coefficient (ICC). Basing to Polikandrioti, data collected through structured questionnaires will be considered valid for this research. Interviews and observations are also valid and justified tools to use since they provide primary data from the field. It would be possible to interact with the respondents who will be directed on how to complete the questionnaires through interviews. Observation will be done to confirm the questionnaire is completed as required and also other aspects which were not considered in the draft questions would be noted.

### **3.6 Data Analysis and Presentation**

After data collection, the questionnaires will have been coded, edited to detect errors and omissions to enhance accuracy and precision. Data analysis will be done using descriptive design to enable the researcher to describe the relationship between the variables. The study will involve 4 years performance of new products before 2010 and analysis of new products each year thereafter

Level of provision of financial services, importance of credit provision level and need for financial innovation in credit provision in future level will be investigated This would enable determine if there exists a relationship between the two.

A summary of data collected will be recorded as indicated in the table 3.1.

Table 3.1: Summary of collected data sample table

Respondent number	Available financial services level through new products (score out of 10)	Level of Credit provision	Likelihood level of need of financial innovations in future in credit provision

Considering the hypothesis stated earlier, the null hypothesis will be: H0: Financial innovations have no significant influence on credit provision levels in SACCOs (equivalent to saying coefficient;  $r = 0$ ). From this an alternative hypothesis will be: H1: Financial innovation has significant influence on credit provision levels in SACCOs (equivalent to saying coefficient;  $r \neq 0$ ).

Table 3.2: Summary of collected data from new products sample table

	Number of New Products over 4 years					
	Before 2010	2010	2011	2012	2013	Total
BOSA PRODUCTS						
FOSA PRODUCTS						

### 3.6.1 Analytical Model

The regression equation to be used in analyzing the effect of financial innovations on credit provision by SACCOs will be as follows;

$$y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + e$$

Where;

$Y$  = Credit provision

Will be measured using information of the amount of total loans and credits given by the SACCO each year.

$X_1$  = Financial Innovations

Will be measured using the number of new products a SACCO introduces each year.

$X_2$  = Profitability

Will be measured using the total gross profit per year

$X_3$  = Liquidity

Will be measured by dividing total Current Assets by total Current Liabilities each year.

$e$  = Random error term.

### 3.6.2 Test of Significant

The study will use Analysis of variance in order to test the significance of the model in measuring the effect of financial innovations on credit provision by SACCOs. On

extracting the ANOVA statistics, the researcher will look at the value of F-test and compare it with the tabulated value on the F-distribution table. The study will be tested at 95% confidence level and 5% significant level. If the significance number found is less than the critical value ( $\alpha$ ) set 2.4, then the conclusion will be that the model is significant in explaining the effect.

## **CHAPTER FOUR**

### **DATA ANALYSIS, RESULTS AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents the information processed from the data collected during the study on the relationship between financial innovations used by Saccos and credit provision. The sample composed of 20 duly licensed to carry out deposit-taking Sacco business in Kenya for the financial year ending on 31st December, 2013.



## **4.2 Financial Innovations**

The respondents the products they have for BOSA are normal loans for development, school fees loans, emergency loans, bridging, emergency loan, development loan, long term loan (Development loan), Ufanisi, refinancing and Nafuu loan, settlement, salary advance and bridging loan.

On FOSA the respondents indicated products such as Dumisha loan, biashara loan, Somesha loan, saving account, one month advance, three months advance, 6/12 month advance, bankers cash, school fees loan, fosa personal loan, School fees loan and development loan.

On how financial innovations can improve credit provision the respondents indicated that it will create a wider range of product creation and available for eligible members. It was recommended that this can be done by introducing new products and by leading more i.e loaning.

### 4.3 Descriptive Statistics

**Table 4. 1: Summary of study variables**

	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Liquidity ratio</b>	<b>.02</b>	<b>14.72</b>	<b>1.8273</b>	<b>2.97757</b>
<b>Loans</b>	<b>76614986.00</b>	<b>1.48E10</b>	<b>2.1387E9</b>	<b>3.69753E9</b>
<b>Gross income</b>	<b>12219461.00</b>	<b>2.17E9</b>	<b>3.2634E8</b>	<b>5.19001E8</b>
<b>Number of new products</b>	<b>2.00</b>	<b>56.00</b>	<b>28.0000</b>	<b>24.72853</b>

From the findings, liquidity ratio had an average of 1.8273 for the study period, loans averaged 2.1387e9, gross income had a mean score of 3.2634e8 while the total number of new products for the study period was 140 with an average of 28.

### 4.3 Regression Results

The study conducted a cross-sectional multiple regression on several financial innovations variables over the period 2010 - 2013 and of credit provision. Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (credit provision) that is explained by all the three independent variables (financial innovations, profitability and liquidity).

**Table 4.2: Results of multiple regression between credit provision and the combined effect of the selected predictors**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.893	0.797	0.746	0.532

**Source: Author (2014)**

The three independent variables that were studied, explain 74.6% of the credit provision as represented by the adjusted  $R^2$ . This therefore means the three variables contribute to 74.6% of credit provision, while other factors not studied in this research contributes 25.4% of credit provision among companies listed in the Nairobi Securities Exchange. Therefore, further research should be conducted to investigate the other (25.4%) factors influencing credit provision among deposit-taking Sacco in Kenya.

**Table 4.3: Summary of One-Way ANOVA results of the regression analysis between credit provision and predictor variables**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	4.682	3	1.279	4.263	0.0142
Residual	16.46	16	0.348		
Total	21.142	19			

**Source: Author (2014)**

From the ANOVA statistics in table 4.3, the processed data, which are the population parameters, had a significance level of 0.0142 which shows that the data is ideal for making a conclusion on the population's parameter. The F calculated at 5% Level of significance was 4.263. Since F calculated is greater than the F critical (value = 3.24), this shows that the overall model was significant i.e. there is a significant relationship between financial innovations and credit provision.

**Table 4.4: Regression coefficients of the relationship between credit provision and the three predictive variables**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.975	0.286		3.507	0.028
	Financial Innovations	0.542	0.204	0.486	2.982	0.021
	Profitability	0.601	0.145	0.309	3.283	0.031
	Liquidity	0.584	0.138	0.223	3.876	0.029
Dependent variable: credit provision						

**Source: Author (2014)**

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

$$CP = 0.975 + 0.542FI + 0.601P + 0.584L$$

Where CP is credit provision, FI is financial innovations, P is profitability and L is liquidity. From the model, taking all factors (financial innovations, profitability and

liquidity) constant at zero, credit provision was 0.975. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in financial innovations will lead to a 0.542 increase in credit provision; unit increase in profitability will lead to a 0.601 increase in credit provision while a unit increase in liquidity will lead to a 0.584 increase in credit provision.

According to the model, all the variables were significant as their significance value was less than 0.05. All the variables (financial innovations, profitability and liquidity) were positively correlated with credit provision.

#### **4.5 Discussion**

From the above regression model, the study found out that there were financial innovations variables influencing the credit provision among deposit-taking Sacco in Kenya, which are financial innovation's, profitability and liquidity. They influenced it positively. The study found out that the intercept was 0.975 for all years.

The three independent variables that were studied (financial innovations, profitability and liquidity) explain a substantial 74.6% of credit provision among deposit taking Saccos in Kenya as represented by adjusted  $R^2$  (0.746). This therefore means that the three independent variables contributes 74.6% of credit provision among deposit taking Saccos in Kenya while other factors and random variations not studied in this research contributes a measly 25.4% of the of credit provision among deposit taking Saccos in Kenya.

The study established that the coefficient for financial an innovation was 0.542, meaning that financial an innovation positively and significantly influenced the credit provision among deposit taking Saccos in Kenya. Mudibo (2005) established that product innovation strategies which include: new deposit accounts, credit cards, debit cards, personal loans and money transfer services affected performance of SACCOs. The study found that product replacement contributed to the SACCOs profitability. The respondents indicated that product development and product repositioning were important in both the supply of the core product as well as in the support part of any offer and they also agreed that the SACCOs product development strategy aimed at youthful generation.

This is consistent with a study by Noyer (2007) which argued that financial innovation in the banking industry has been spurred by research in products and services and new distribution channel systems such as internet and mobile banking as well as innovation in payment systems. This, according to Noyer (2007) has translated into more improved financial performance of the banks that make a conscious effort to innovate. Although this study looked at banks grouped as a sector, and not individually, improved of performance of banks individually would result into better sector performance by aggregation. A study by Tidd and Hull (2003) also determined that the banking sector in emerging economies is characterized by rapid innovations in new financial instruments, systems and explosive growth in information technology which have fuelled financial performance.

Lyons, Chatman & Joyce (2007) argue that the relevant aspects of technological change include innovations that reduce costs related to the collection, storage, processing, and

transmission of information, as well as innovations that transform the means by which customers' access bank services.

Ayyagari et al. 2007) present evidence that innovation is higher in firms that have access to finance. Neil, Hiba and Cowling, (2014) suggest that problems remain for innovative small firms, and that this is not simply due to risk profiles. In fact, using standard credit scores, there are very few substantive differences in risk profiles between innovative and non-innovative firms. Since the analysis of Schumpeter, finance has been seen as a vital part of innovation processes. This indicates that value of sector automated clearing transactions is a significant predictor of loan provision of Saccos.

The study established that the coefficient for profitability was 0.60, meaning that profitability positively but significantly influenced the credit provision among deposit taking Saccos in Kenya. According to Cuñat (2007), when liquidity in the financial markets is scarce firms with more financial slack are in a better position to provide liquidity insurance through an increased amount of trade credit provided to their clients. Productivity and innovation are also linked to financial development more directly (Aghion, 2005) argue that technological catch up is determined by thresholds in financial development.

The study further revealed that the coefficient for liquidity was 0.584, meaning that liquidity positively and significantly influenced the credit provision among deposit taking Saccos in Kenya. This is in line with Gungor (2007) who argue that if banks use provisions to smooth earnings, there should be a positive relationship between credit provision and earnings. Evidence of the existence of earnings smoothing through



provisions remains fairly strong, at least for industrialized countries (Pérez et al 2008). In a few papers, provisions are found to vary inversely with earnings when they are negative. Meanwhile, studies on emerging markets have not found evidence for earnings smoothing; in fact, earnings have been found to negatively affect provisioning in emerging Asia Laeven and Majnoni, (2003), Craig et al (2006)

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

In this chapter, the researcher presents the summary, conclusions and the recommendations made from the study findings. It comprises of a section on summary of findings, conclusions made from the study findings, recommendations made after considering the study findings, suggestions for any further studies and lastly a section on limitations of the study.

#### **5.2 Summary of Findings**

The study sought to collect data of 20 deposit taking SACCOs in Kenya. Data analysis was through multiple linear regression and correlation analysis. Correlation analysis was through Karl Pearson correlation coefficients. The population of study was 184 duly licensed to carry out deposit-taking Sacco business in Kenya for the financial year ending on 31st December, 2013. A convenient sampling design was used using a Sample size of 20 registered SACCOs where an individual would volunteer to participate. The study

used primary data obtained from a survey of managers of different Saccos using questionnaires. After data collection, the questionnaires were coded, edited to detect errors and omissions to enhance accuracy and precision. Data analysis was done using descriptive statistics to enable the researcher to describe the relationship between the variables. The study involved 4 years performance of new products before 2010 and analysis of new products each year thereafter. The study used Analysis of variance in order to test the significance of the model in measuring the effect of financial innovations on credit provision by SACCOS. From the regression model, the study found out that there were financial innovations variables influencing the credit provision among deposit-taking Sacco in Kenya, which are financial innovation's, profitability and liquidity. They influenced it positively. The study found out that the intercept was 0.975 for all years. The three independent variables that were studied (financial innovations, profitability and liquidity) explain a substantial 74.6% of credit provision among deposit taking Saccos in Kenya as represented by adjusted  $R^2$  (0.746). The study therefore concludes that financial innovations have an effect on credit provision among deposit taking Saccos in Kenya.

### **5.3 Conclusion**

From the study results, it is evident that financial innovation in SACCOS result into improved credit performance. This is supported by the positive correlation between credit levels and new products introduced each year. Financial innovation presents more convenience, efficiency and security to SACCOS customers resulting to more demand (uptake) for the new innovations. Demand for traditional products reduces as customers

switch to the more effective products; this as seen by the negative correlation between liquidity and the credit provision throughput.

Financial services firms provide the payment services and financial products that enable households and firms to participate in the broader economy. By offering vehicles for investment of savings, extension of credit, and risk management, they fuel the modern capitalistic society. While the essential functions performed by Saccos have remained relatively constant over the past several years, the structure of the industry has undergone dramatic change in terms of innovations. Competition has created a fast-paced industry where firms must change in order to survive. Financial innovation in the Saccos has been spurred on by the forces described by Noyer (2007). A successful innovation thus generates a proprietary competitive position that bestows on the Saccos a competitive advantage and superior performance.

From the study results, it is evident that financial innovation in Saccos result into improved credit provision. This is supported by the strong positive correlation between financial innovations used by Saccos and credit provision. The study concludes that Sacco need to adopt various types of financial innovation effectively to prevent them from failing in their obligations and meeting their objectives: minimizing loan defaulters, cash loss and ensuring the SACCOS perform better increasing the returns on assets and helps the Sacco in attaining maximum financial returns that lead to financial performance. Further, the study concludes that SACCOS adopt various types of financial innovation that lead to enhanced loan provision, these include process innovation, product innovation, and institutional innovation in both BOSA and FOSA.

Financial innovation presents more convenience, efficiency and security to Saccos customers resulting to more demand (uptake) for the new innovations. Having looked at this component of financial stewardship, it is therefore important for SACCOs to promote financial stewardship so as to promote their loan provision and hence their performance. According to Mudibo (2005), the major financial decisions involved in financial stewardship include product innovation, FOSA, BOSA activities among others.

#### **5.4 Recommendations**

Given the findings from this study there are a number of policy recommendations that can be adopted by the SACCOs' management in adopting financial innovation to increase loan provision. A policy recommendation is simply written policy advice prepared for some group that has the authority to make decision. The Sacco policy recommendations are the key indicators through which SACCOs policy decision will be made in most level of SACCOs. Sacco has suffered credit losses through relaxed lending standards, unguaranteed credits, and the borrower's perception.

The study recommends that SACCOs should make fairly accurate personality morale profile assessment of prospective and current borrowers and guarantors. This will minimize credit losses by securing the borrowers guarantee.

The study also recommends that co-operatives need to employ combination of various types of financial innovation such as product, process and institutional innovations in order to form a strategic alliance with other institutions such as MFIs and Banks for managing cases beyond their capacity.

This study recommended that SACCO must keep abreast with new trends in the financial market. Such areas include ATMs and other technology driven products. The management of these Saccos should approve the ICT budgets to acquire new software to fully automate its operations which will then form a platform from where new products will be served.

SACCOs should, therefore, design proper mechanisms so as to enhance innovativeness which leads to variety and quality loan products hence growth of Sacco's wealth. SACCOs should Establish Irrecoverable Loan provision policies. They should make adequate loan provisions to promote safety of funds. This will ensure that loan assets are not overstated.

The government should support SACCOs to offer a wider variety of products and services to their members other than just simple deposits and credits to encourage higher savings rate. Implementing new products can give new life to SACCOs and renewed interest from the public and their members and the government should make better legislation, which protects member's savings and prudential supervision of the industry.

## **5.5 Limitation of the Study**

The researcher encountered various limitations that may have affected the findings of this study. For instance, the study relied on secondary data sources. Secondary data can, however, be unreliable as they are intended for other purposes. This could include convincing external stakeholders that the business performs well. To curb this, the study sought audited financial results of the Saccos to collect data.

The sample for this study might have been small and could have the drop-back of not being representative of the population reality. To mitigate this, the researcher carried the study on Saccos that had traded consistently for five years. Moreover, the study intended to conduct a study at individual Sacco level to determine the relationship between innovation and loan provision which improved the accuracy of results. Further, other factors might have effect on the loan provision of Saccos which might moderate the relationship between financial innovation and loan provision. In cognizance of this, the study tested the significance of the established relationship to mitigate this. In addition, information on loan provision is sensitive and access to such information proved a challenge.

The study was based on a four year study period from the year 2010 to 2013. A longer duration of the study will have captured periods of various economic significances such as booms and recessions. This may have probably given a longer time focus hence given a broader dimension to the problem.

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

## **5.6 Suggestions for Further Research**

As this study considered the relationship of only two financial innovation variables at a macro level, more research on the correlations between the performance of various financial innovations; such as products and channels would be needed.

It would also be of value to explore at a micro level whether Saccos characteristics such as size, capital base, top management and geographical coverage determine the Saccos innovation orientation. Another suggested study would be to explore on the challenges that Saccos face development and implementation of innovative products and services and ways of addressing such challenges. A study should also be done on effects of board members decisions on Growth of SACCOs wealth.

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## **APPENDICES**

### **Appendix i: Transmittal letter**

Flavian Kungu Gatimu,

P.o Box 517-01000,

Thika

8th September 2014

Dear Respondent,

RE: DATA COLLECTION

Research is being conducted to determine the effect of financial innovations on improvement of credit provision in SACCOs. This is an academic study to be submitted towards fulfillment of the requirements of the award of Master of Business Administration degree at the University of Nairobi. Kindly be informed that you have been selected to participate in this study as a respondent. Your acceptance in responding to all the questions in the attached questionnaire as completely, correctly and honest as possible will enable successful completion of this research. Your response will be treated with confidentiality and will be used within the mandate of this research only.

Should you have any queries or comments regarding this survey, kindly contact the supervisor: Dr. Josephat L. Lishenga, Department of Finance and Accounting, University of Nairobi. [jlishenga@uonbi.ac.ke](mailto:jlishenga@uonbi.ac.ke)

Looking forward to your valued feedback,

Yours faithfully,

Flavian Kung'u Gatimu

Registration Number: D61/62729/2010

Cell phone 0711901124, email :[gatimuflavian@gmail.com](mailto:gatimuflavian@gmail.com)

**Researcher**

## **Appendix ii: The Questionnaire**

My name is **Flavian K. Gatimu Reg. D61/62729/2010**. I am undertaking an **MBA course in Finance at the School of Business, University of Nairobi**. This study is for a project entitled, **“The effect of Financial Innovations on Credit Provision by Savings and Credit Co-operative Societies in Kenya.”**

**Instructions:** Please answer the following questions in the section A, B and C by marking the relevant box with a tick (√) or writing down your answer in the space provided where applicable.

**Confidentiality:** The responses you provide will be strictly confidential. No reference will be made to any individual(s) in the report of the study.

### **Section A: Background Information**



This section of the questionnaire refers to background information. Although we are aware of the sensitivity of the questions in this section, the information will allow us to compare groups of respondents.

1. What is your Name? \_\_\_\_\_
2. What is the Name of your SACCO? \_\_\_\_\_
3. What is your position in the SACCO? \_\_\_\_\_

**Section B: Financial Innovations**

4. Does your SACCO have a Front office Services Activity (FOSA)? [ ] Yes [ ] No

5. In the table below indicate the name of the products that were available before

2010 in both BOSA and FOSA

	List of products Available before 2010
BOSA	
FOSA	

6. In the table below indicate the number of new products that were available in your SACCO in the years indicated;

	2010	2011	2012	2013
BOSA				
FOSA				
TOTAL				

**Section C: Credit Provision**

7. Kindly fill the table below with regard to the items indicated as per the years' performance in each column.

	2010	2011	2012	2013
Total Amount of loans and credit				
Gross Income				
Total Current Assets				
Total Current Liabilities				

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8. Please give any suggestions or recommendations on how financial innovations can improve credit provision.

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**Appendix iii: List of registered SACCOs by SASRA**

**THE SACCO SOCIETIES REGULATORY AUTHORITY (SASRA) DEPOSIT-TAKING SACCO SOCIETIES LICENSED BY THE SACCO SOCIETIES REGULATORY AUTHORITY**

PURSUANT to regulation 8 (1) of The Sacco Societies (Deposit-Taking Sacco Business) Regulations, 2010, The Sacco Societies Regulatory Authority (SASRA) notifies the general public of the additional Sacco Societies that have been duly licensed to carry out deposit-taking Sacco business in Kenya for the financial year ending on 31st December, 2014.

#	<b><u>NAME OF SOCIETY</u></b>
1	2NK SACCO SOCIETY LTD
2	AFYA SACCO SOCIETY LTD
3	AGRO-CHEM SACCO SOCIETY LTD
4	AINABKOI FARMERS SACCO SOCIETY LTD
5	AIRPORT SACCO SOCIETY LTD
6	ALL CHURCHES SACCO SOCIETY LTD
7	ARDHI SACCO SOCIETY LTD
8	ASILI SACCO SOCIETY LTD
9	BANANA HILL SACCO SOCIETY LTD
10	BANDARI SACCO SOCIETY LTD
11	BARAKA SACCO SOCIETY LTD
12	BARATON SACCO SOCIETY LTD
13	BIGWA SACCO SOCIETY LTD
14	BIASHARA SACCO SOCIETY LTD
15	BORESHA SACCO SOCIETY LTD
16	BURETI SACCO SOCIETY LTD
17	BUSIA TESO TEACHERS SACCO SOCIETY LTD
18	CAPITAL SACCO SOCIETY LTD
19	CENTENARY SACCO SOCIETY LTD
20	CHAI SACCO SOCIETY LTD
21	CHEMELIL SACCO SOCIETY LTD
22	CHUNA SACCO SOCIETY LTD

- 23 COMOCO SACCO SOCIETY LTD
- 24 COSMOPOLITAN SACCO SOCIETY LTD
- 25 COUNTY SACCO SOCIETY LTD
- 26 DAIMA SACCO SOCIETY LTD
- 27 DHABITI SACCO SOCIETY LTD
- 28 DIMKES SACCO SOCIETY LTD
- 29 DUMISHA SACCO SOCIETY LTD
- 30 EGERTON SACCO SOCIETY LTD
- 31 ELGON TEACHERS SACCO SOCIETY LTD
- 32 ELIMU SACCO SOCIETY LTD
- 33 ENEA SACCO SOCIETY LTD
  
- 34 FARIJI SACCO SOCIETY LTD
- 35 FORTUNE SACCO SOCIETY LTD
- 36 FUNDILIMA SACCO SOCIETY LTD
- 37 GASTAMECO SACCO SOCIETY LTD
- 38 GITHUNGURI DAIRY & COMMUNITY SACCO  
SOCIETY LTD
- 39 GOODFAITH SACCO SOCIETY LTD
- 40 GREEN HILLS COFFEE GROWERS SACCO SOCIETY  
LTD
- 41 GUSII MWALIMU SACCO SOCIETY LTD
- 42 HARAMBEE SACCO SOCIETY LTD

- 43 HAZINA SACCO SOCIETY LTD
- 44 ILKISONKO RURAL FARMERS SACCO SOCIETY LTD
- 45 IMARIKA SACCO SOCIETY LTD
- 46 IMARISHA SACCO SOCIETY LTD
- 47 IMENTI SACCO SOCIETY LTD
- 48 ISIOLO TEACHERS SACCO SOCIETY LTD
- 49 JACARANDA SACCO SOCIETY LTD
- 50 JAMII SACCO SOCIETY LTD
- 51 JIJENGE SACCO SOCIETY LTD
- 52 JIETEGEMEE SACCO SOCIETY LTD
- 53 KAIMOSI TEA SACCO SOCIETY LTD
- 54 KAKAMEGA TEACHERS SACCO SOCIETY LTD
- 55 KAPENGURIA SACCO SOCIETY LTD
- 56 KATHERA RURAL SACCO SOCIETY LTD
- 57 KEIYO TEACHERS SACCO SOCIETY LTD
- 58 KENPIPE SACCO SOCIETY LTD
- 59 KENVERSITY SACCO SOCIETY LTD
- 60 KENYA BANKERS SACCO SOCIETY LTD
- 61 KENYA CANNERS SACCO SOCIETY LTD
- 62 KENYA HIGHLANDS SACCO SOCIETY LTD
- 63 KENYA MIDLAND SACCO SOCIETY LTD
- 64 KENYA POLICE SACCO SOCIETY LTD
- 65 KENYA ACHIVERS SACCO SOCIETY LTD

- 66 KIAMBA DAIRY SACCO SOCIETY LTD
- 67 KINGDOM SACCO SOCIETY LTD
- 68 KIPSIGIS EDIS SACCO SOCIETY LTD
- 69 KITE SACCO SOCIETY LTD
- 70 KITUI TEACHERS SACCO SOCIETY LTD
- 71 KIMBILIO SACCO SOCIETY LTD
- 72 KMFRI SACCO SOCIETY LTD
- 73 KOLENGE TEA SACCO SOCIETY LTD
- 74 KONOIN SACCO SOCIETY LTD
- 75 KORU SACCO SOCIETY LTD
- 76 K-UNITY SACCO SOCIETY LTD
- 77 KWALE TEACHERS SACCO SOCIETY LTD
- 78 LAIKIPIA TEACHERS SACCO SOCIETY LTD
- 79 LAMU SACCO SOCIETY LTD
  
- 80 LENGU TUMAINI SACCO SOCIETY LTD
- 81 MAGADI SACCO SOCIETY LTD
- 82 MAGEREZA SACCO SOCIETY LTD
- 83 MAISHA BORA SACCO SOCIETY LTD
- 84 MAONO DAIMA SACCO SOCIETY LTD
- 85 MARAKWET TEACHERS SACCO SOCIETY LTD
- 86 MARSABIT TEACHERS SACCO SOCIETY LTD
- 87 MASAKU TEACHERS SACCO SOCIETY LTD

- 88 MENTOR SACCO SOCIETY LTD
- 89 MERU SOUTH FARMERS SACCO SOCIETY LTD
- 90 METROPOLITAN SACCO SOCIETY LTD
- 91 MMH SACCO SOCIETY LTD
- 92 MOI UNIVERSITY SACCO SOCIETY LTD
- 93 MOMBASA PORT SACCO SOCIETY LTD
- 94 MOMBASA TEACHERS SACCO SOCIETY LTD
- 95 MUDETE FACTORY TEA GROWERS SACCO SOCIETY  
LTD
- 96 MUHIGIA SACCO SOCIETY LTD
- 97 MUKI SACCO SOCIETY LTD
- 98 MILIKI SACCO SOCIETY LTD
- 99 MURATA SACCO SOCIETY LTD
- 100 MWALIMU NATIONAL SACCO SOCIETY LTD
- 101 MWEA RICE FARMERS SACCO SOCIETY LTD
- 102 MWETHERI SACCO SOCIETY LTD
- 103 MWINGI MWALIMU SACCO SOCIETY LTD
- 104 MWITO SACCO SOCIETY LTD
- 105 NACICO SACCO SOCIETY LTD
- 106 NAFKA SACCO SOCIETY LTD
- 107 NAKU SACCO SOCIETY LTD
- 108 NANDI FARMERS SACCO SOCIETY LTD
- 109 NANDI HEKIMA SACCO SOCIETY LTD



- 110 NANDI TEACHERS SACCO SOCIETY LTD
- 111 NANYUKI EQUATOR SACCO SOCIETY LTD
- 112 NAROK TEACHERS SACCO SOCIETY LTD
- 113 NASSEFU SACCO SOCIETY LTD
- 114 NATION SACCO SOCIETY LTD
- 115 NAWIRI SACCO SOCIETY LTD
- 116 NDEGE CHAI SACCO SOCIETY LTD
- 117 NDOSHA SACCO SOCIETY LTD
- 118 NEST SACCO SOCIETY LTD
- 119 NG'ARISHA SACCO SOCIETY LTD
- 120 NITUNZE SACCO SOCIETY LTD
- 121 NRS SACCO SOCIETY LTD
- 122 NTIMINYAKIRU SACCO SOCIETY LTD
- 123 NUFAIKA SACCO SOCIETY LTD
- 124 NYAHURU UMOJA SACCO SOCIETY LTD
- 125 NYALA SACCO SOCIETY LTD
- 126 NYAMBENE ARIMI SACCO SOCIETY LTD
  
- 127 NYAMIRA TEA FARMERS SACCO SOCIETY LTD
- 128 NYERI TEACHERS SACCO SOCIETY LTD
- 129 OGEMBO TEA GROWERS SACCO SOCIETY LTD
- 130 PUAN SACCO SOCIETY LTD
- 131 ORIENT SACCO SOCIETY LTD

- 132 RACHUONYO SACCO SOCIETY LTD
- 133 SAFARICOM SACCO SOCIETY LTD
- 134 SHERIA SACCO SOCIETY LTD
- 135 SIMBA CHAI SACCO SOCIETY LTD
- 136 SIRAJI SACCO SOCIETY LTD
- 137 SMART CHAMPIONS SACCO SOCIETY LTD
- 138 SOLUTION SACCO SOCIETY LTD
- 139 SOT TEA GROWERS SACCO SOCIETY LTD
- 140 SOTICO SACCO SOCIETY LTD
- 141 STIMA SACCO SOCIETY LTD
- 142 SUBA TEACHERS SACCO SOCIETY LTD
- 143 SKYLINE SACCO SOCIETY LTD
- 144 SUKARI SACCO SOCIETY LTD.
- 145 SUPA SACCO SOCIETY LTD
- 146 STAKE KENYA SACCO SOCIETY LTD.
- 147 TAI SACCO SOCIETY LTD
- 148 TAIFA SACCO SOCIETY LTD
- 149 TAITA TAVETA TEACHERS SACCO SOCIETY LTD
- 150 TARAJI SACCO SOCIETY LTD
- 151 TELEPOST SACCO SOCIETY LTD
- 152 TEMBO SACCO SOCIETY LTD
- 153 TENHOS SACCO SOCIETY LTD
- 154 TESCOM SACCO SOCIETY LTD

- 155 THAMANI SACCO SOCIETY LTD
- 156 THARAKA NITHI TEACHERS SACCO SOCIETY LTD
- 157 TIMES- U SACCO SOCIETY LTD
- 158 TOWER SACCO SOCIETY LTD
- 159 TRANS-NATIONAL TIMES SACCO SOCIETY LTD
- 160 TRANSCOM SACCO SOCIETY LTD
- 161 TRANS-COUNTIES SACCO SOCIETY LTD
- 162 UCHONGAJI SACCO SOCIETY LTD
- 163 UFANISI SACCO SOCIETY LTD
- 164 UFUNDI SACCO SOCIETY LTD
- 165 UKRISTO NA UFANISI WA ANGLICANA SACCO  
SOCIETY LTD
- 166 UKULIMA SACCO SOCIETY LTD
- 167 UNAITAS SACCO SOCIETY LTD
- 168 UNI-COUNTY SACCO SOCIETY LTD
- 169 UNITED NATION SACCO SOCIETY LTD
- 170 UNIVERSAL TRADERS SACCO SOCIETY LTD
- 171 VIHIGA COUNTY FARMERS SACCO SOCIETY LTD
- 172 VISION AFRICA SACCO SOCIETY LTD
- 173 VISION POINT SACCO SOCIETY LTD
- 174 WAKENYA PAMOJA SACCO SOCIETY LTD
- 175 WAKULIMA COMMERCIAL SACCO SOCIETY LTD
- 176 WANA-ANGA SACCO SOCIETY LTD

- 177 WANANCHI SACCO SOCIETY LTD
- 178 WANANDEGE SACCO SOCIETY LTD
- 179 WARENG TEACHERS SACCO SOCIETY LTD
- 180 WASHA SACCO SOCIETY LTD
- 181 WAUMINI SACCO SOCIETY LTD
- 182 WEVARSITY SACCO SOCIETY LTD
- 183 WINAS SACCO SOCIETY LTD
- 184 YETU SACCO SOCIETY LTD